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SUMMARY AND EVALUATION OF

PROJECTIONS OF SUPPLY OF AND DEMAND FOR AGRICULTURAL PRODUCTS IN

MEXICO

TO 1965, 1970, AND 1975

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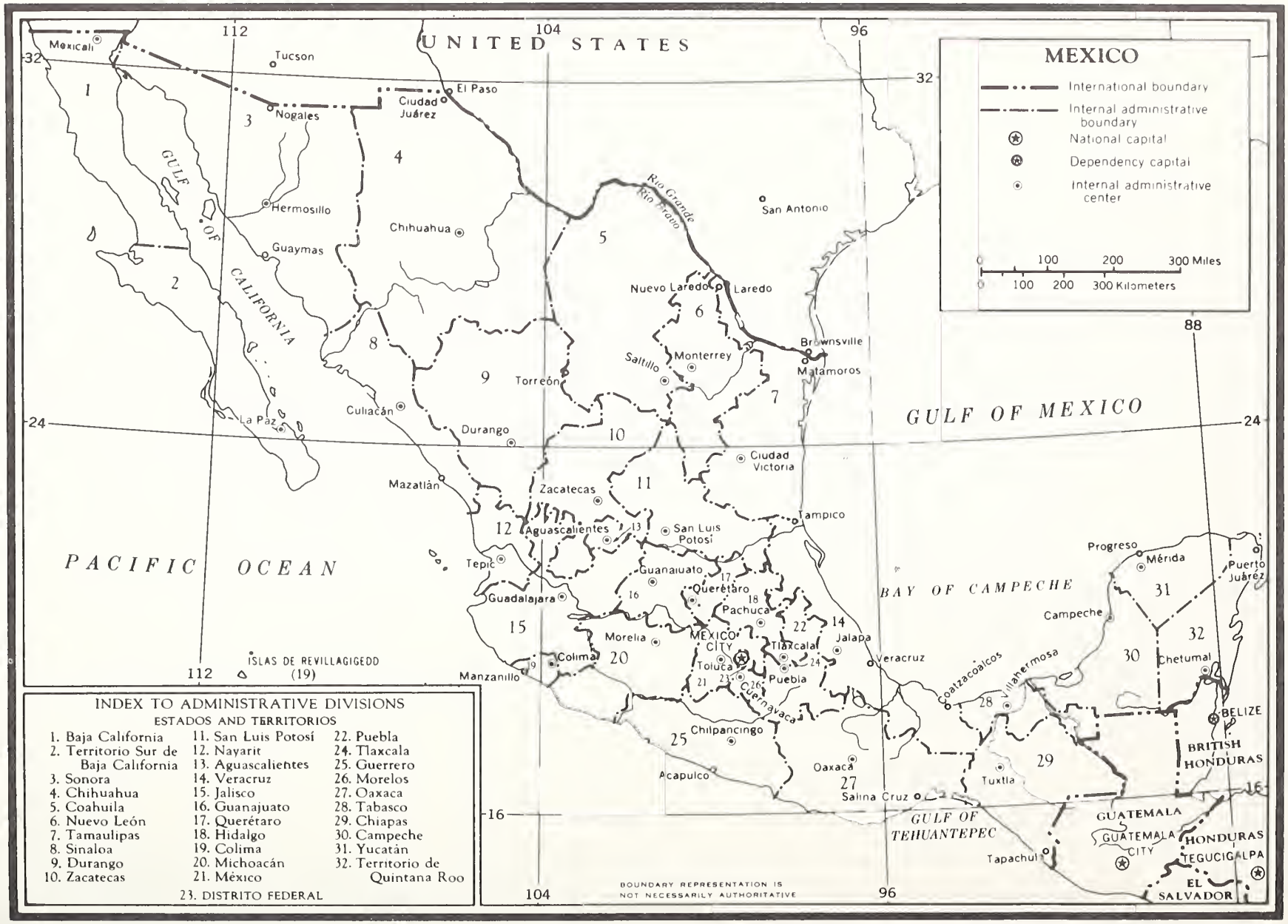
WESTERN HEMISPHERE SUPPLY
AND DEMAND STUDY

Summary Report No. 2

U.S. Department of Agriculture
Economic Research Service



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FOREWORD

The Western Hemisphere Branch carries out a continuing program of review and analysis of general economic and agricultural developments in Western Hemisphere countries and territories. This program is a part of the overall research efforts of the Foreign Regional Analysis Division to inform and assist U.S. groups concerned with developments in these areas which affect U.S. agriculture and trade. Such groups include farmers, businessmen, universities, and Government agencies.

Other reports in the long-range outlook summary series are: Summary and Evaluation of Jamaica, Trinidad and Tobago, Leeward Islands, Windward Islands, Barbados, and British Guiana, Projected Levels of Demand and Supply and Imports of Agricultural Products to 1975, ERS-Foreign 148; and Summary and Evaluation of Long Term Forecasts of the Supply and Demand of Agricultural and Livestock Products in Venezuela, ERS-Foreign 191. Complete study reports are also available.

The program of contract studies in long-range outlook research was instituted in 1958, utilizing funds available from P.L. 480. Under this program, Supply and Demand Studies have been instituted or are underway in more than 40 countries which account for two-thirds of world trade in agricultural commodities. This program has stimulated much additional research, and many groups that have made such studies are continuing to update the projections.

The Mexican study caused a reappraisal of the agricultural stiuation in that country and is currently providing a basis for agricultural planning and programming. The Study group, set up by the Bank of Mexico, has continued to revise and update projections and future research results are expected to be of considerable benefit to both Mexican and U.S. agriculture.

In August 1966, an independent and detailed report, "Projections of Supply of and Demand for Agricultural Products in Mexico to 1965, 1970, and 1975," called the study report, was published. The study report was the result of 3 years of work, between 1962 and 1964, by the Joint Working Group set up by the Bank of Mexico. It was a cooperative venture of the U.S. Department of Agriculture and the Mexican Ministry of Agriculture, Ministry of Finance, and the Bank of Mexico. Both countries shared in its financing. The contract was administered by the Western Hemisphere Branch, Foreign Regional Analysis Division, Economic Research Service of the U.S. Department of Agriculture. The study report is available from the Division of Information, Office of Management Services, U.S. Department of Agriculture, Washington, D.C. 20250

This summary report gives the study projections for 1965, 1970, and 1975 in tabular form. The text compares projections for 1965-66 with actual production and trade figures for that year, and compares the result with the projections for 1975. For many commodities, the demand, production, and exports were far in advance of the projections for 1965. The section, Implications for U.S. Agricultural Trade, is based on analysis of both the study report and production and trade figures that became available after its publication.

Charles R. Davenport, Chief
Western Hemisphere Branch
Foreign Regional Analysis Division

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Washington, D. C. January 1968

SUMMARY

Modest increases in future U.S. exports to Mexico can be expected for such agricultural commodities as oilseeds, vegetable fats and oils, hides and skins, fruits, dairy products, and oats. U.S. exports of breeding cattle, baby chicks, tobacco, and hops, while still high, are declining because of competition from other producing countries.

Mexico has achieved a rapid rate of growth in agricultural production which has more than offset the country's rapid population gains. The population of Mexico was 36 million in 1960 and it was projected in study report (cited in the preface) to increase to 61 million by 1975--an annual rate of 3.6 percent.

The gross domestic product (GDP) was projected to increase at an annual rate of 6.3 percent, from $12,479 million in 1960 to $31,345 million in 1975, or from $346 to $514 per capita (in 1960 prices). Rising per capita income, expanding population, and the growth of the urban sector were expected to stimulate increasing domestic demand for more and higher quality food. Per capita demand for corn, dry beans, and green peppers was expected to decline, while that for 59 other commodities covered by the study was expected to increase substantially.

The projections made in the study report indicated an aggregate rate of growth of agricultural output of 4 percent per year for 1960-70 and 3.3 percent for 1970-75. Both rates fall short of the 5 percent estimated to be required to maintain the projected rate of growth of GDP, showing the need for improved techniques and organization in agricultural production and for larger investments in this sector in the 1970's than in 1960's.

Domestic demand for agricultural products was projected to rise by 4.5 percent per year during 1960-70 and 4.6 percent during 1970-75. These rates would result in a modest increase in the surplus of crop production over domestic demand, from $238 million in 1960 to $249 million in 1975, and a change in livestock production from a surplus of $27 million in 1960 to a deficit of $181 million by 1975, all in terms of 1958-60 average farm prices.

Domestic surpluses were projected for wheat, corn, rice, beans, coffee, tomatoes, strawberries, cantaloups, grapes, cocoa beans, cotton, henequen, sugar, and honey in 1975. Serious deficits are expected in oilseeds, meat, milk, lard and tallow, wool, hides and skins, and certain vegetables and fruits.

Traditional export commodities are cotton, coffee, sugar, livestock and meat, tomatoes, and henequen. More recent exports include cocoa beans, fruits, and, since 1964, wheat and corn. Mexican agricultural exports in the base year of 1960 totaled $374 million, 27 percent of all exports of goods and services. Export demand for 1975 is projected at $608 million, 21 percent of total exports at 1960 prices. However, export demand for 1975 was expected to be inadequate to absorb the projected domestic surpluses of cotton, coffee, cocoa beans, and honey. On the other hand, domestic surpluses for 1975 of tomatoes, strawberries, cantaloups, and henequen were expected to be insufficient to fulfill the projected export demand for these commodities. For other surplus commodities--corn, wheat, rice, beans, and grapes--export demand was not projected but is likely to be adequate except for corn and wheat. In this connection, study imbalance between projected export demand and export availabilities reflects

agricultural policy and other program adjustments to be made in the farm sector with export demand generally expected to be met except for meat.

Imports of agricultural commodities totaled about $65 million in 1960--6 percent of total imports of goods and services. Import needs for both crop and livestock products are projected to increase sharply through 1975. Wool, hides and skins, edible fats and oils, animal feed, milk, seed, and breeding cattle have been the main imports in the past. Projections to 1975 indicate continued demand for these commodities in addition to feed grains, potatoes, some pulses, vegetables except tomatoes, most fruits, tobacco, and meat.

These projections of surpluses and deficits were valid only so long as their evaluation did not cause Mexico to change its policies and programs, and this has already happened. Economic planning and policy decisions made since the study was completed provided for larger investments and corrected some structural deficiencies in the agricultural sector. As a result, agricultural output in recent years has been growing at the rate of over 6 percent per year instead of the projected 4 percent and most crop projections now seem conservative. The projected crop surpluses are likely to be larger than the study report's estimates, except possibly for cotton and coffee, whose production has been reduced in line with the present and expected domestic and foreign demand. Projected deficits in vegetable and fruit supplies may turn into substantial exportable surpluses. Corn and wheat surpluses may continue to present a serious problem of adjustment. Import demand is expected to continue for the commodities now on the import list, except for fruits, vegetables, and tobacco, but imports of edible fats and oils will probably be smaller than the projections.

U.S. agricultural imports from Mexico increased from an average of $181 million in 1955-59 to $276 million in 1965; the principal commodities were coffee, livestock, meat, fruits, vegetables, and sugar. U.S. agricultural exports to Mexico gradually declined from a record $81 million in 1950-54 to $78 million in 1955-59 and to $68 million in 1965. Principal U.S. exports are dried milk, hides and skins, breeding stock, variety meats, feedstuffs, seed, and oils and oilseeds.

SUMMARY AND EVALUATION OF "PROJECTIONS OF SUPPLY OF AND DEMAND FOR AGRICULTURAL PRODUCTS IN MEXICO TO 1965, 1970, AND 1975"

By
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INTRODUCTION

Mexico and the United States share a common border and have complementarity of trade. The country has a rapidly growing population which surpassed 42 million in 1965, a stable economy and currency, and a high level of self-sustained growth. The Mexican share in our exports is moderate. In 1965, it represented 3.9 percent of our total, and 1.4 percent of our agricultural exports. Nevertheless, the United States is Mexico's leading supplier and principal customer. In 1965, 66 percent (or $1,026 million) of Mexico's total imports came from the United States, and 63 percent ($626 million) of its total exports arrived here.

Agriculture gave employment to 54 percent of Mexico's labor force and contributed 17 percent to its gross domestic product (GDP). About 12 percent of the value of total imports and 53 percent of exports in 1965 were for agricultural products. The country is largely self-sufficient in its basic foods and fibers. It exports substantial quantities of cotton, coffee, sugar, tomatoes, fruit, and livestock and meat. However, some agricultural products have been imported on a regular basis and others have been imported to offset fluctuations in domestic supply. Mexico's nonagricultural economy is dominated by petroleum and metal mining, but also includes a considerably developed and expanding basic industrial sector which comprises steel and steel products, petrochemicals, paper, construction and transport equipment, automobile components and assembly, and other manufactures.

The primary purpose of the study was to determine the production and consumption trends of agricultural products in Mexico and to project the import demand and the export availability in 1965, 1970, and 1975. The objective was to develop long-range projections for the economy, including population, GDP, aggregate demand for specified agricultural products, and the magnitude of domestic supplies of these products. The study report analyzed the following products: Grains; beans and other pulses; fruits and vegetables; alfalfa; sugar and honey; meat; milk and eggs; animal fats and vegetable oils; cocoa; coffee and tobacco; textile fibers; and hides.

The study was the first of this kind done in Mexico. It met with numerous obstacles in the collection of data, the establishment of the base for comparison, and aggregation. Most of these were overcome with the aid of the Mexican Governmental departments involved. The data used included official Mexican Government sources, some private Mexican studies, and the results of a sample survey of family income and expenditure in urban and rural areas conducted specially for the study by the Bank of Mexico's Office for the Study of Agricultural Projections. A part of the survey was subcontracted to a private organization. 1/

1/ CEIR de Mexico, S.A., a subsidiary of the Corporation for Economic and Industrial Research, Inc.

Objectives of this summary report are: To present the findings of the study report in a compact form; to update selected parts of the study data where more recent information is available; to evaluate the study in the light of more recent data; and to evaluate the study report's findings as implications for U.S. agriculture and trade. The methods used in the projections are also briefly discussed.

All value figures in the text and in the tables have been converted into dollar values at the rate of exchange of 12.49 Mexican pesos to 1 U.S. dollar. Quantities are expressed in metric tons, unless otherwise noted.

ECONOMIC PROJECTIONS

Population

The demographic census conducted in Mexico in 1960 showed a population of just over 36 million. This represented an increase of over 10 million people from 1950 and an annual rate of growth of 3.1 percent, up from the 2.8 percent per year during 1940-50 (table 1). 2/

The study estimated the population at 42,808,800 in 1965, assuming an annual growth rate of 3.5 percent during 1961-65. The projections indicated a population of 51,086,000 in 1970 and 60,892,000 in 1975, and an annual growth rate of 3.6 percent. These projections were made by age groups on the basis of birth, mortality, and internal migration rates as shown in census figures. They were conditioned by two basic assumptions: A specific increase in life expectancy, and maintenance of the present gross reproduction rate until 1970, with a slight decline thereafter.

By 1960 urban population roughly equaled the rural population; the first had expanded at the rate of 5 percent annually during the preceding 20 years, while the latter expanded at only 1.7 percent. 3/ The estimates show that, by 1965, over 55 percent of Mexicans lived in cities. This proportion is projected to increase to over 63 percent in 1975. The projected economically active population, which grew at the rate of 3 percent annually during 1951-60, will increase at the rate of 3.5 percent during 1961-75. Hence, the labor force will have to absorb about 500,000 more people every year, which may present serious problems despite the move towards industrialization.

The study population projections are comparable to the United Nations' latest estimates, 4/ which showed a population of 42,689,000 in 1965 and assumed the same rate of growth as in the study.

National Income

Among Latin American countries, the Mexican economy can be considered one of the best developed. During the last two decades it has achieved a steady and high rate of growth and considerable diversification in production and enlargement of capacity, particularly through rapid industrialization. Compared with more advanced countries,

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2/ Tables are grouped at the end of the report.

3/ The study report defines urban centers as having 2,500 inhabitants or more.

4/ World Population Prospects, Population Studies, No. 41, United Nations, 1966, and Population and Vital Statistics Report, Statistical Papers, Series A. Vol. XIX, No. 2, United Nations, April 1, 1967.

however, it still suffers from a low level of technical skills, low productivity, and low per capita income, although there are considerable regional differences.

Gross domestic product projections to 1965, 1970, and 1975 were made by analyzing historical trends and adjusting for the rate of growth of private investment, the balance of payments on current account, and the capacity to finance public investment. In the recent past, Mexican GDP, in 1959-61 dollars, increased from $6.8 billion in 1956 to $14.5 billion in 1963, with an annual rate of growth of nearly 6 percent. The per capita increase was from $265 to $362 during the same period--a 2.5 percent growth rate per year. Projected figures indicated a GDP of $16.3 billion in 1965 and $31.3 billion in 1975, assuming an annual growth rate of 6 percent during 1960-70 and 7 percent during 1970-75. Per capita GDP was expected to grow to $381 in 1965 and to $514 in 1975, or at 2.4 percent per year during 1960-70 and at 3.3 percent during 1970-75. These projections assumed a much greater overall investment effort than that made in any past period (table 2).

The rate of economic growth achieved since 1950 was largely due to the increase in capital investment and to the gains in labor productivity. During 1950-63, real capital assets of the country expanded at 3.8 percent per year; but since the labor force increased by 3.2 percent per year (from 8 to 12 million people in the period), capital invested per employed person rose at the rate of only 0.6 percent per year. Nonetheless, the average output per person employed increased from $826 in 1950 to $1,154 in 1963, or at 2.6 percent a year.

The process of economic development during 1950-63 underwent two shifts. On the one hand, since the rate of growth of private investment slowed down from 5.3 percent a year during the 1950's to 2.1 percent in the early 1960's, the rate of growth of public investment had to be increased considerably after 1957, from about 2.1 percent a year to over 4 percent, in order to maintain the achieved rate of capital formation above 4 percent a year. The share of public investment, in total investment increased from 44 percent in 1960 to 47 percent in 1963. Then, however, the rate of private investment began to increase again, due mostly to the inflow of foreign private capital. On the other hand, the public sector shifted emphasis from investment in basic tangible capital formation, such as transport, electric power, and irrigation to investment in the social sector (health, education, housing, and other public services), in order to reduce income inequalities. As a result, the share of investment in the social sector increased from about 10 percent in 1950 to 29 percent in 1963.

The degree of economic development achieved in Mexico is reflected in the changed structure of output. During 1950-63, the share of agricultural output in GDP decreased from 20 to 16 percent, while the share of industrial output increased from 29 to 32 percent. The share of the services sector remained relatively stable until 1963 at about 52 percent, but declined to 48 percent by 1965 in favor of the agricultural and industrial sectors.

The projected GDP figures were based on the assumption that private investment will be able to increase its growth rate from its average of 4.6 percent per year in 1950-63 to 8.8 percent in 1964-70 and to 9.2 percent in 1970-75, and public investment from an average of 3.3 percent to 9.3 percent and 9.2 percent, respectively. Since then, these rate have proved to be attainable, and by 1965 the rate of private investment surpassed the projected rate (table 2).

Within this framework, sectoral projections indicate that the rate of growth of agricultural output should increase from 4.2 percent in 1951-60 to 5.0 percent by 1975 and that of industrial output from 7.0 to 8.0 percent. Consequently, by 1975 agriculture should account for some 13 percent of total GDP, industry for 35 percent, and public services for 52 percent.

Within this framework, sectoral projections indicate that the rate of growth of agricultural output should increase from 4.2 percent in 1951-60 to 5.0 percent by 1975 and that of industrial output from 7.0 to 8.0 percent. Consequently, by 1975 agriculture should account for some 13 percent of total GDP, industry for 35 percent, and public services for 52 percent.

The data available since the study was completed indicate that the projected figures are not unrealistic. In 1965, Mexican GDP reached $16.8 billion ($392 per capita) as against the projected $16.3 billion ($381 per capita). The projected GDP for 1975, some $31.4 billion ($514 per capita), does not therefore seem unrealistic. However, despite the high rate of growth of Mexican economy the study does not foresee a radical improvement in the standard of living of the people of Mexico. Rapid growth of population, the relative scarcity of cultivable lands, slow progress in correcting basic inequalities of incomes, and increasing pressure on available employment opportunities, will continue to exercise a strong depressing influence, particularly in the rural sector.

Trading Capacity

Foreign trade projections for Mexico were based on past trends and adjusted for current policy considerations and for assumptions underlying the general economic development that were described in the previous section.

A rapid increase in population and the recent improvement in per capita income, strengthened by measures taken by the Government to stabilize domestic prices and increase real wages, have increased considerably domestic demand for agricultural commodities. Consequently, the share of external demand in total demand for Mexico's products declined from 14 percent in 1950 to 10 percent in 1963. During that time, the volume of goods and services exported increased 4.9 percent annually. The average export prices increased by only 0.8 percent per year, while average import prices increased 2.8 percent per year. Hence, the capacity to import increased at only 2.9 percent annually. 5/

Mexico exports of goods and services, measured in constant 1960 dollars, were projected to increase from $1.6 billion in 1963 to $2.9 billion in 1975, while imports of goods and services were projected to increase from $1.8 billion in 1963 to $3.4 billion in 1975 (table 3). The deficit balance of trade and services was projected to increase from $194 million in 1963 to $519 million in the same period.

In response to foreign demand and to the country's policy of agricultural and trade diversification, the composition of exports shifted considerably and the trends set in the 1950's are expected to continue through the 1970's. The proportion of exports of six traditional agricultural products--cotton, coffee, sugar, livestock and meat, tomatoes, and henequen--decreased from 27 percent of total exports in 1950-60 to 22 percent in 1965 and is expected to decrease further to 21 percent in 1975. Insofar as these projections assumed a rather high availability of meat for export, the actual share of these commodities in total export is likely to fall even lower. Similarly, the share of five traditional products of the extractive industries--copper, lead, zinc, sulfur, and petroleum--declined from 18 percent of total exports of goods and services in 1950 to 8 percent in 1965. On the other hand, the share of other exports, including manufactures and semimanufactures, increased from 13 percent to 18 percent between 1950-60 and was projected to increase to 20 percent in 1975, but had already reached 24 percent in 1965. The fastest growing export items are the receipts from tourism and border transactions. As shares in total receipts from the exports of goods and

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5/ The capacity to import that is generated by exports of goods and services, is defined as the quantum of exports of goods and services times the terms of trade index.

services, they increased from 28 percent in 1950 to 38 percent in 1963 and were expected to increase further to 44 percent in 1975, but had already reached that proportion in 1965.

The proportion of imports to total supply decreased from 12 percent in 1950 to 10 percent in 1963. This decline is due to domestic substitution of consumer goods and raw materials that were formerly imported.

The share of consumer goods in total imports of goods and services declined from 11 percent in 1950 to 7 percent in 1965, the share of fuels declined from 3 percent to 1 percent, and that of raw materials rose from 26 to 30 percent between 1950 and 1965. The share of capital goods remained relatively stable at about 30 percent.

In general, although Mexican exports between 1950 and 1965 grew slightly faster than imports, 5 as against 4.9 percent annually if measured in real values, the capacity of the country to finance imports from export proceeds declined due to the steady deterioration in terms of trade. Consequently, future capacity to import depends on the improvement in the terms of trade and on the faster expansion of exports. Both of these forces are expected to come into play as the proportion of manufactures in total exports increases and the occasional large imports of grains in the past become net exports.

AGRICULTURAL DEMAND PROJECTIONS

Methodology of Domestic Demand Projections

Domestic demand projections for food were based on estimated relationships between income and demand, taking into account the projected increase of population, its rural-urban trends, and expected levels of GDP. To determine the relationship between income and demand, a family income and expenditure survey was conducted in 1963. Income-consumption functions derived from the data provided by the cross-sectional survey were checked against those derived from a time-series regression analysis of per capita GDP and per capita domestic demand for agricultursl products. From this analysis, a selection of income elasticities was made to provide a basis for projecting per capita demand (tables 4-7).

The survey was designed to study the consumption patterns of urban and rural populations and to relate these to family incomes. Data on income and consumption were collected from a representative sample covering the whole population. The size of the sample, allocated on a geographical stratification basis, provided for the coverage of 5,070 households, selected from 327 rural and 165 urban centers. Usable replies were received from 92 percent of sampled households.

The survey covered family expenditures on most food items, beverages and tobacco, clothing, footwear, housing, durable goods and their maintenance, medical services, personal services, education, transportation, recreation, gifts, insurance, and savings. To determine family income, all forms of cash income as well as income in kind were taken into consideration. The survey showed that income is less than expenditure for households with monthly incomes below $120, which includes 73 percent of the Mexican population. For this reason and because of greater accuracy of the information on expenditures, total expenditure rather than total household income was used as the independent variable of the consumption function.

The levels of consumption per person were usually expressed in physical units. In a few cases, where physical units were not available, or their use would result in a high margin of error, money expenditure units were used. Separate consumption functions and income elasticities of demand were calculated for urban and rural populations

to measure the difference in their expenditure patterns for each commodity. Linear, logarithmic, semilogarithmic, and inverse logarithmic functions were applied to all series of gathered data and the function which showed the highest correlation coefficient and the lowest standard error was used for demand projections. The derived consumption functions were not used directly to project per capita consumption; instead, they were used to compute per capita consumption indices. These indices were then used to project the demand on the basis of actual per capita consumption for 1959-61 average.

Another set of consumption functions was calculated on the basis of time series analysis of per capita GDP and per capita apparent consumption, selecting for each commodity the most representative period. Basic time series of Mexican consumption were constructed from information supplied by the Bureau of Agricultural Economics of the Ministry of Agriculture, the Federal Inspection of Packing Plants, and the Foreign Statistical Yearbooks. The results were used to study changes in demand from 1940 to 1960 and to check the results obtained from the family income and expenditure survey.

To project total domestic demand, intermediate demand for grain for seed, feed, and industrial uses was also estimated. The demand for feedgrains was expected to rise in the same proportion as the demand for meat. The elasticities used in the projections were derived as follows: For corn, the implicit income elasticity of demand for all kinds of meat; for oats, barley, and sorghum, the demand elasticity for "other meats," mainly pork and poultry. Industrial demand projections for barley and rice were made on the basis of the income elasticity of demand for beer, and for corn on the basis of past trends in the demand for starches, sirups, alcohol, and other derivatives. Feed demand projections were made on the basis of proportions derived from historical series.

General Pattern of Domestic Demand

Aside from high population and GDP growth, the pattern of demand for agricultural products in Mexico was influenced by three main factors: Great disparity of incomes between urban and rural areas, subsistence agriculture persisting in many rural areas, and a high rate of urbanization. This pattern conforms to the general situation in most developing nations.

Because people in urban centers are free, to a large extent, from purely local production conditions and enjoy much higher incomes than those in rural areas, consumption levels in cities are considerably higher than those in the countryside. In the latter, the standard of living is lower and therefore the same increase in income leads to a considerably larger rise in consumption than it does in cities. As the proportion of urban population increases, its lower income elasticity of demand for agricultural products will be more significant in determining aggregate demand. The combined effect of rising incomes and the rapid pace of urbanization is the substitution of higher protein foods, such as meat, milk, and eggs for starches; substitution of vegetable oils for animal fats; increased consumption of fruits; and the substitution of wheat for corn.

During 1940-50, however, these changes were distorted by an outbreak of a livestock disease (aftosa or foot-and-mouth disease) which severely restricted livestock production and raised the price of meat and dairy products while increasing the demand for cereals, pulses, and vegetables. The supply of livestock products returned to normal after 1950, and the per capita consumption of meat increased rapidly, while that of cereals remained fairly stable during the 1950's and declined thereafter.

In the aggregate domestic demand for agricultural products on a constant price basis, the share of cereals consumed rose from 32 percent in 1940 to 34 percent in 1950 and then declined to 27 percent in 1960 (table 8). The share of pulses rose from 3.5 percent in 1940 to 4.1 percent in 1950 and to 4.3 percent in 1960, but seems to have

shown a moderate decline since then. At the same time, the demand for livestock products fell from 37 percent in 1940 to 33 percent in 1950, and then increased to 36 percent by 1960. The same factors also caused a sharp increase in the demand for oilseeds. Their share in the aggregate demand rose from 3 percent in 1940 to nearly 6 percent in 1960, and maintained this position through 1965. The increase in consumption of oilseeds was determined not only by the shortage of meat and animal fats in the fifties, but also by the rapid expansion of cotton cultivation which enabled the demand to be met to an increasing degree from domestic supply. The share of animal fats in aggregate demand for fats and oils declined correspondingly. The share of sugar went up from 4.8 percent in 1940 to 5.6 percent in 1950, and then stabilized at this level. Finally, the share of fruits in total demand seems to have remained relatively stable at around 8 percent.

Since trends were analyzed on a constant price basis, they also reflect similar quantity shifts and opposite price trends--strong factors in the demand shifts.

Domestic demand for agricultural products, projected on the basis of expected income gains and derived income elasticities, generally continues trends since 1940 if price fluctuations are discounted. An increase was expected in the relative importance of the demand for meat, milk, eggs, and fruit and a decrease in the relative importance of cereals, pulses, and animal fats. The projections imply an annual rate of growth of demand for livestock products of 5 percent and for crop products of 4.2 percent. On a per capita basis, the demand for livestock products will grow at the rate of 1.4 percent and for crop products at the rate of 0.9 percent.

Although Mexico has achieved a remarkable increase in aggregate per capita income, as shown in the previous section, the progress achieved in correcting the disparity of incomes between urban and rural areas has been modest. In these circumstances, the rate of urbanization is the chief factor shaping the pattern of demand. However, consumption patterns in rural areas are not altogether uniform. Where commercial agriculture has developed because of irrigation, improvement of the road network, and other public works, as in the North and North Pacific zones, nutritional standards are higher and tend to resemble those of cities. Lower standards predominate in the arid areas of the Central and South Pacific zones.

Changes in Nutritional Standards

Although projected increases of demand for food commodities may seem large in many cases, they imply only a modest improvement in nutritional standards of the Mexican population (tables 4, 10, 11).

Deficiency in calorie intake was eliminated, to a large extent, during the two decades after World War II. Hence, the projected increase in daily intake per person is only 2.8 percent, from 2,654 calories in 1960 to 2,727 calories in 1975. However, the projected 4-percent increase in protein intake is from 67 grams per person in 1960 to about 70 grams in 1975. This is still far below the nutritional levels generally considered satisfactory and achieved in the United States, Canada, and Western Europe, where the average is 90 grams per person daily. The projections, however, imply an improvement in the composition of protein intake, namely an increase in the share of proteins of animal origin from 19.2 grams in 1960 to 24.6 grams in 1975, but this is still below the minimum of the 30.1-gram level recommended for 1970 by the Nutrition Institute of Mexico. Furthermore, the survey revealed that in 1963 the share of animal protein intake was only 22.4 grams in rural areas and 36.8 grams in cities. Only 38 percent of the population had the recommended daily minimum intake of animal protein, while 62 percent of the population was below that level and of these, almost 16 percent had a daily intake of less than half of that minimum.

Domestic Commodity Demand

Individual projections in terms of quantities and values were made for 55 principal agricultural commodities and commodity groups. These projections took into account household demand for food, intermediate demand for seed and feed, and industrial demand in food processing and other industries (table 9). They are discussed here by main groups.

Traditional Mexican agriculture is based on the cultivation of corn. In spite of the substitution of wheat for corn as income rises and the urban population increases, corn still remains the main cereal. For instance, the consumption of corn per capita in 1960 was estimated to be 171 kilograms in rural areas and 103 kilograms in cities, whereas that of wheat was 24 kilograms in rural areas and 41 kilograms in cities.

On the average, human consumption of corn was projected to decline from 121 kilograms per person in 1960 to 101 kilograms in 1975, and that of wheat to increase from 33 kilograms to 38 kilograms in the same time. In the total demand, the fall in human consumption was expected to be more than compensated by an increase in the demand for fodder and for industrial use (in the production of starches, sirups, and alcohol). The fact that per capita consumption of corn tends to fall while that of wheat tends to increase as incomes rise reflects an improvement in food intake of the population. Wheat bread provides more calories, proteins, and carbohydrates than the traditional Mexican corn tortilla.

The demand for rice, the third important food cereal, is limited in Mexico, except in the Gulf Zone States, where it is almost as important as corn. Elsewhere in the country it is consumed as a supplemental food when incomes rise. Per capita consumption was projected to increase from 4.9 kilograms in 1960 to 5.5 kilograms in 1975, and industrial demand was to double.

The expansion of cattle production and the increase in the demand for meat, dairy, and poultry products is likely to increase the demand not only for corn for feed but also for other feedgrains, principally sorghum, oats, and barley. So, while the total population of Mexico was expected to increase by nearly 70 percent between 1960 and 1975, the demand for oats, barley, sorghum, and alfalfa was projected to double.

Beans are another staple consumption item of the Mexican population and are the most important individual source of proteins, constituting about one-seventh of the total protein intake. However, the rise in income and urban development tends to substitute animal products for beans. In 1960, the per capita yearly consumption of beans was 15.0 kilograms in cities as against 19.1 kilograms in rural areas. On the overall basis, the per capita consumption was projected to decrease from 16.9 kilograms in 1960 to 14.9 kilograms in 1975. Of other pulses, chickpeas are a minor food item, but are growing in importance as a poultry feed. Total pulse demand was expected to increase by 137 percent over the period studied.

Consumption of vegetables and fruits is still low in Mexico, particularly in rural areas where, on a per capita basis, it is less than half that of the city consumption. Both income increase and urbanization will, therefore, expand the demand considerably. The aggregate demand for vegetables is expected to increase by almost 100 percent and that for fruits by 110 percent. The demand for food processing industries is expected o grow more rapidly than the demand for fresh produce. Industrial demand for vegetables will increase by 120 percent and for canned fruits by almost 170 percent during 1960-75.

Direct consumption of sugar has grown at a rate barely above that of population, while the intermediate demand for use by soft drink and fruit packing industries has developed more rapidly. During 1952-62, the share of industrial demand in total demand increased from 14 percent to 28 percent. The projections show that total demand for sugar in Mexico is expected to increase by 100 percent between 1960 and 1975, but the direct demand per inhabitant will rise from 20.0 kilograms to 22.2 kilograms only.

Meat, milk, and eggs are characterized by a high income elasticity of demand and by considerable differences in per capita consumption between rural and urban centers. In 1960, per capita meat consumption was 17 kilograms in urban centers and 9 kilograms in rural areas; consumption of eggs was 6 kilograms in cities and 4 kilograms in rural areas, and consumption of milk was 124 kilograms in cities and 78 kilograms in rural areas.

On the whole, domestic demand for beef was projected to more than double and the per capita consumption to increase from 8.0 kilograms to 9.7 kilograms between 1960 and 1975. Total demand for other kinds of meat (pork, goat, mutton and lamb, and poultry) was expected to rise by 145 percent, and the per capita consumption to increase from 5.6 kilograms to 8.1 kilograms. Demand for eggs is expected to rise by 113 percent, and per capita consumption to increase from 5.1 kilograms to 6.4 kilograms. Finally, the demand for milk will increase from 103.5 kilograms to 119.6 kilograms per person.

In the recent past the food processing industries accounted for about 9 percent of domestic demand for beef. This proportion is expected to increase to 11 percent by 1975. The industries' demand for pork is expected to remain about constant, at 3.3 percent, and for milk at 25 percent of total domestic demand.

The bulk of demand for fats and oils for human consumption in Mexico is supplied by cottonseed, sesame seed, peanuts, safflowerseed, and lard, and for the soap-making industry, by cottonseed and copra. The difference between rural and urban demands, however, is significant. Per capita consumption of oils and fats (excluding butter) in rural areas is 43 percent below that in urban centers. Lard constitutes 70 percent of fats and oils consumption in rural areas, but only 45 percent in cities.

The share of the soap-manufacturing industry in the total demand for oils and fats fell from 30 percent in 1950 to 20 percent in 1962, due to the displacement of cheap laundry soap by chemical detergents. However, this share may stabilize due to the expansion of total soap use.

Total demand for fats and oils is expected to grow about 92 percent between 1960 and 1975. Oilseed demand is expected to have the largest increase--125 percent. The demand for lard and tallow will increase by 80 percent.

Coffee and cocoa are basic drinks in Mexican rural areas. However, coffee seems to be replacing cocoa. Consumption of cacao products in cities is no longer general; they are consumed principally at higher income levels. Between 1960 and 1975, consumption of cacao products was expected to increase from 0.54 to 0.65 kilogram per person and that of coffee from 0.94 kilogram to 1.04 kilograms per person.

Finally, total domestic demand for cotton was expected to increase by 114 percent between 1960 and 1975, and per capita consumption from 3.15 to 3.99 kilograms. However, these per person consumption estimates seem too high for Mexico. Total demand for wool was expected to increase by 118 percent; that for henequen (used for twine, rope, and sacking) by 73 percent; and for hides and skins by 100 percent during the period.

Export Demand

Separate external demand projections were limited to the 14 principal export commodities: Cotton, coffee, sugar, beef, tomatoes and other vegetables, oranges, strawberries, cantaloups, watermelons, pineapples, henequen, cacao, and bananas (table 12). These accounted for 96 percent, by value, of all agricultural exports of Mexico in 1962. For other commodities, for which production projections exceeded the expected domestic demand, it was assumed that either foreign demand will exist or that production will adjust to the volume of domestic demand.

Some of the 14 projected export commodities make up a sizable proportion of total world imports. For example, on the basis of the 1958-62 average, Mexican exports of cotton made up about 10 percent of total world imports; coffee, 3 percent; sugar, 2.7 percent; beef, 2.6 percent; and henequen, almost 4 percent. It was assumed in the projections that Mexico will be able to retain its share of the respective world markets.

These projections were made on the basis of an analysis of demand prospects in the principal Mexican markets--United States, European Economic Community (EEC), United Kingdom, Sweden, Switzerland, Canada, and Japan--and on the assumption that these countries would continue to import from Mexico the same percentage of their needs. The rate of population growth, the rise in per capita income, and estimated income elasticities of demand in these areas were used as the main variables in the projection model. Average export figures for 1958-62 formed the base period for the projections.

Export demand projections seem generally reasonable in the light of newer information. However, they may prove optimistic in the case of cotton and coffee, due to competition in foreign markets, and conservative in the case of cacao and beef. They are considerably underrated for fruits and vegetables. Exports of fruits and vegetables in 1965 were approaching 1975 projections.

Individual commodity projections are considered in more detail in the commodity projections and trade prospects sections.

Total Demand

Domestic demand projections, in 1959-61 dollars, indicate an increase in the per capita level of consumption of agricultural products from about $51 in 1960 to $59 in 1975. Aggregate domestic demand is expected to increase from $1,832 million to $3,577 million and export demand from $287 million to $381 million during this time. This means that, while the aggregate domestic demand will almost double, consumption per person of all foods will increase by only 15 percent.

The increase in per capita consumption implies that the demand for high protein foods, such as meat, milk, and eggs, will increase by some 25 percent, while direct consumption of cereals will decline. However, the decline in direct consumption of cereals will be offset by a growth in the demand for cereals as feed for livestock and for industrial use.

The study methodology, the analysis of the general pattern of demand, and the projected changes in domestic demand appear to be reasonable. However, nutritional standards and goals are high, compared with USDA reference standards for Mexico of 2,450 calories and 60 grams of protein, including a minimum of 10 grams of animal protein and a total of 20 grams of animal and pulse protein per capita per day.

Sources and Methodology

Supply projections for most crop products included in the study were made on the basis of calculated trends in areas harvested and yields, with adjustments for changes in inputs of labor, technology, and capital. This involved the preparation of basic time series of area harvested, yields per hectare, and total output for 1925-62; derivation of trend functions; projections on trends; and adjustments of projections for input changes (tables 22 and 23).

Trend projections for 17 of the most important crops (corn, wheat, rice, potatoes, sweetpotatoes, dry beans, chickpeas, tomatoes, oranges, lemons, apples, grapes, cocoa beans, coffee, tobacco, cotton, and sugarcane), were adjusted, taking into account regional availability of irrigated and dry farming cropland, land improvement plans for 1965-70, the growth of demand, the influence of land tenure, prospects for competing crops, and prospective changes in yields. Yield considerations included results obtained in agricultural experiment stations, distribution of improved seed, current consumption of fertilizers and insecticides, and other relevant factors.

Time series for corn and bean production were adjusted before use to establish trend functions for projections, because the comparison of the Bureau of Agricultural Economics data with the agricultural census data for 1929, 1939, and 1949 revealed a large underestimation by the Bureau. Projections based on revised trends were then adjusted, considering demand increases, prevailing weather conditions, and gains in yields achieved in the principal corn- and bean- producing States.

The production of oilseeds (sesame, peanuts, safflower, copra, oil palm, flaxseed, and soybeans) was projected on the basis of specific considerations for each crop and adjusted for the degree of substitution that might take place among these products. The projections for cottonseed output stemmed from projected cotton output.

Output projections for the remaining crops (barley, oats, sorghum, garlic, onions, green and dried peppers, henequen, and fruits) were made on the basis of past trends in output, and modified by factors expected to affect production, without quantifying these factors.

According to the study report, official livestock production series were generally considered unsatisfactory in many ways prior to 1960. Consequently, production series used to establish trends for projections were taken from various private and official sources. Series on livestock numbers and area of pastureland, by zone and by State, were based on the 1960 agricultural census. The number of animals slaughtered and the average weight per carcass for 1956-61 were based on estimates of the Bureal of Agricultural Economics and the carcass tonnage equivalent of cattle exports was derived from foreign statistical yearbooks and from information supplied by the Federal Inspectorate of Packing Plants.

Meat supply projections were made by establishing total inventories of animals in the base period 1956-62, calculating rate of growth of these inventories through 1975, estimating carcass meat production from slaughter rates for meat production and an average carcass weight per animal and subtracting tallow and lard from the carcass weight. The average carcass weight of beef was assumed to increase at the rate of 0.2 percent annually and that of other livestock to remain constant.

Milk production was projected on the basis of the numbers of milk cows 3 years old and over. Its rate of increase was derived from 1930-60 census data, and it was assumed that the average milk yield per cow would increase by 2.7 percent per year.

The supply of honey was projected by assuming a continuation of the rate of increase in production derived from combined series of exports and estimated domestic consumption during 1952-61.

Patterns of Production and Prospects

Agricultural production increased rapidly after 1940, when earlier phases of agricultural reform were complete. Data are insufficient for measurement of this expansion with great precision before 1960. Still, measuring in real 1958-60 farm prices, the study data indicate that between 1940 and 1950, agricultural output grew at an annual rate of 4.5 percent, and between 1950 and 1960 at 4.4 percent per year (tables 13, 14).

Crop production gains before 1940 were due mainly to the expansion of harvested area. From 1940 to 1960 the harvested area increased from 7.7 million hectares to 12.8 million hectares, an annual rate of 2 percent. However, the quantum per hectare (value based on physical output times constant 1958-60 farm prices), went up from $57.57 in 1940 to $97.44 in 1960, or 3 percent annually. Thus, the influence of yields on the increase of production, estimated at 21 percent of the production increase between 1927 and 1940, rose to 52 percent in 1941-59 and to 67 percent in 1951-60.

The increase in agricultural production was accompanied by some structural changes. The share of crops in total agricultural production increased from 54 percent in 1940 to 63 percent in 1960 while the share of production of animal origin decreased correspondingly from 46 to 37 percent. A very rapid increase in the production of textile fibers, oilseeds, and vegetables in 1940-50, of sugar in 1940-60, and of tobacco in 1950-60 is responsible for this shift. Increased yields, due to improved technology and the extension of cultivation on irrigated lands, are largely responsible for the surge of production of these products.

Total agricultural output was projected to increase annually at the rate of 4 percent from 1960 to 1970 and 3.8 percent from 1970 to 1975. Crop production is expected to grow at the rate of 3.7 percent, with animal production increasing 4 percent annually through 1970 and 1975. However, it was pointed out that to maintain general growth of the economy at the rate of 6 percent annually in 1961-70 and at 7 percent from 1970 to 1975, the agricultural sector would be required to expand at annual rates of 4.5 and 5.0 percent in the same periods.

During 1961-64, total agricultural output increased at the annual rate of 6.1 percent; the increase in crop production was 4.4 percent and that of animal production was 3.6 percent. Thus, crop production in these 4 years exceeded the projected rate, but animal production fell below it. Although the combined rate exceeds the projected rate of growth of the agricultural sector, it falls below the rate required to maintain the level required in gross domestic products projections. Consequently, as the present decade draws to a close, there seems to exist an increasing need for programs to stimulate agricultural production, particularly in the lagging animal sector, to maintain the projected GDP growth and levels of per capita consumption.

Factors of Production

Land Availability and Use

Total potential cropland in Mexico is variously estimated from as high as 37 million hectares to a low of 25 million hectares. The study report adopts the estimate of the Ministry of Hydraulic Resources, 29.4 million hectares. This figure nearly coincides with the data given in the agricultural census of 1960 (tables 15, 16).

According to the census, 81 percent of the potential cropland was incorporated in farms by 1960, leaving only some 5.6 million hectares in probable reserve. In the same estimates, total potential pastureland amounted to 85.7 million hectares, of which 92 percent was incorporated in farms by 1960, leaving only 6.7 million hectares for further expansion of grazing land.

Projected aggregate output in 1975 will require some 28.6 million hectares of cropland or 98 percent of the available total, including harvested, idle, and crop-loss areas.

Of 23.8 million hectares of cropland incorporated in farms in 1960, 13.4 million hectares (56 percent) were actually used for crops, the rest (6.5 million hectares) remained idle because of rotation (3.9 million hectares), lack of rain, fallow land, and nonagricultural uses. Of the 13.4 million hectares actually in crops, 87 percent was harvested and production on the rest was lost because of drought, floods, plant diseases, pests, and other factors.

The highest rate of land utilization is found in the North Pacific zone, where 44 percent of the cropland is irrigated, and in the Central zone, where the concentration of population on the available cropland is highest. The proportion of idle cropland is highest in the tropical agricultural regions of the Gulf and South Pacific zones because of soil exhaustion. The highest ratio of harvest losses is in the dry farming regions of the North, North Pacific, and Central zones, mainly because of drought.

The study report shows that about 8 million hectares of cropland could be irrigated. Of this area, nearly 5 million hectares, or 63 percent, were irrigated by 1964. The ratio of harvested area to the total irrigated area has been about 80 percent, but since a part of this area can yield more than one crop per year, this ratio rises at times to over 100 percent.

The prospect for expanding agricultural output through increases in the agricultural area to maintain or surpass the projected rate of growth depends upon the following resource factors: (1) A reserve of 5.6 million hectares of cropland, of which 48 percent is in the Gulf and South Pacific zones, 34 percent in the North and North Pacific zones, and 18 percent in the Central zone; (2) a reserve of 6.7 million hectares of probable pastureland; (3) some 2 to 3 million hectares of irrigable land, most of it in the North and North Pacific zones; (4) about 3 million hectares capable of being improved by drainage and flood control in the Gulf and South Pacific zones. The plans of the Ministry of Hydraulic Resources through 1970 provide for the improvement of 623,000 hectares through irrigation and 169,000 hectares through drainage and flood control.

Labor Force and Land Tenure

The study projections indicate that Mexico will not lack an adequate labor force. On the contrary, despite a high rate of migration to urban centers, population pressure on the available land resources will remain strong and, given the present structure of land tenure (which is assumed to remain unchanged throughout the period under discussion), this pressure is likely to lead to the opening of new areas in the reserve croplands.

The size of farm units varies considerably by region. The proportion of farmland in ejido 6/ holdings increased from 13 percent in 1930 to 47 percent in 1940 and then decreased to 43 percent in 1960 as more individual land titles were distributed in the latter years. The proportion of ejido farmers is similar in all zones, from 33 percent of all farms in the Northern Pacific to 38 percent in the North. The average size of the ejido holding varies from 5.4 hectares in the Central zone to 14.4 hectares in the North Pacific zone.

In the Central and South Pacific zones small holdings of 5 hectares or less predominate (44 percent and 41 percent of all holdings, respectively). There is a higher proportion of large farm units which employ wage-labor and a relatively large amount of capital in the other three zones. In these zones, small holdings of 5 hectares or less comprise 10 to 22 percent of all holdings (table 17).

In the zones where small holdings predominate, the degree of concentration of land use is highest; in the Central zone 10 percent of units held 40 percent of the cropland and in the South Pacific, 11 percent of farm units held almost 58 percent of the cropland. There has been some improvement in farmland distribution. Between 1950 and 1960, the average size of holdings on a countrywide basis increased from 8 to a little less than 9 hectares. This improvement is due to larger sizes of ejido plots and to an increase in the number of farms of 5 hectares or more (except in the Central zone where this type of holding decreased). Small holdings of 5 hectares or less decreased further in size in all zones but so did the share of farmland that they occupy, from 6.4 to 5.3 percent. Undoubtedly, this improvement in land tenure is modest, but it shows progress under unfavorable conditions of very high population pressure on the available land.

Capital and Technology

The rapid expansion of agricultural production in Mexico since 1960 was accompanied by an equally high rate of capital formation in the agricultural sector. Excluding the value of land and inventories, the rate of increase in private capital formation on farms, measured in constant prices, was 4.5 percent annually between 1940 and 1960. The average annual increase was $66.5 million in 1941-50 and $70.3 million in 1951-60. The value of public irrigation works increased 8.3 percent and private works by 4.7 percent annually between 1940-60, increasing fourfold (table 18). Capital investment per farmed hectare increased from $48 to $57, and the capital output per person employed increased from $94 to $109 between 1940 and 1960. The highest rate of capital formation occurred in the North Pacific and the North zones, and the lowest in the South Pacific zones (table 19).

6/ Land in ejido tenure is the property of a village held either for collective use or for distribution among the inhabitants for cultivation in small plots to which each ejido farmer has the right of occupancy so long as he keeps the land under cultivation.

The structure of all capital on farm units changed considerably during 1940-60. Due to the high rate of mechanization, the share of fixed capital declined from 20 to 13 percent of total capital; that represented by cattle, poultry, and beehives remained unchanged, and the share of semifixed capital (machinery, appliances, vehicles, and tools) increased from 9 percent to 16 percent. The largest increase in semifixed capital was for machinery, appliances, and vehicles--8.7 percent per year. The number of tractors increased from 4,500 to 22,700 (or from a total of 114,000 h.p. to 1,738,400 h.p.). In 1950 there were 2.6 tractors per 1,000 hectares of harvested area compared with 5.1 tractors in 1960.

Increasing agricultural production with limited land resources requires improved seed, fertilizers, and insecticides. Programs were systematically introduced after 1940 and consolidated in 1960 in the National Institute for Agricultural Research, operating through five regional centers. While most improved seed is still imported from the United States, a public agency, Productora Nacional de Semillas, has been producing and distributing improved seed for corn, wheat, beans, and sorghum since 1947. Experimental work is being carried out on other seeds. The use of fertilizers increased very rapidly; they were applied to 3.7 percent of total harvested area in 1940 and to 15.3 percent by 1960. Total domestic consumption rose from 25,000 tons in 1940 to 640,000 tons in 1964, while domestic production increased from 4,400 to 163,300 tons in the same period (table 20).

The use of insecticides showed a similar rate of expansion, increasing from 14,000 tons in 1950 to 121,000 tons in 1963. Although a large part of component materials has been imported, domestic manufacture supplies almost all of Mexico's requirements.

The study report projections imply that capital investment in agriculture will continue at the same rate as during 1950-60. This assumption is based on present and planned public investment projects and plans to increase the availability of medium and long-term credit for farm improvement. The area fertilized is expected to increase from 1.8 million hectares (1960) to some 5 million hectares in 1970, and the consumption of insecticides is expected to grow by at least 4.8 percent per year.

The use of more advanced techniques in farming has spread mainly on irrigated land where most of the commercial crops are grown. In other areas, the application of these techniques has been very limited.

Prices, Productivity, and Returns

The growth of agricultural production since 1940 was undoubtedly stimulated by rising prices of farm products. The general index of farm prices increased at the rate of nearly 15 percent annually between 1940 and 1950. Between 1950 and 1957 this rate fell to 6.9 percent and then, as a result of the Government price stabilization policy and a decline in foreign commodity prices after the Korean War, the index moved up only 1.1 percent annually (table 21). The prices of manufactures and services increased more rapidly than farm prices after 1950. The general movement of prices since then seems to have been adverse for farmers because of the increasing costs of agricultural inputs.

The price movement affected crops differently. During 1950-60, real farm prices of oranges, apples, and barley increased by more than 50 percent. Prices of corn, beans, rice, chickpeas, sesame, and alfalfa increased from 8 to 19 percent. The price increase for tobacco, coffee, sugarcane, oats, and peppers was less than 4 percent. Prices of tomatoes, potatoes, and wheat declined 5 to 15 percent and cotton prices declined 29.6 percent.

For most commodities, prices which declined (or increased only slightly) were compensated by an increase in yields. Between 1950 and 1960, yields of wheat, cotton, and beans rose by more than 50 percent. Yields of corn, rice, potatoes, sesame, and tobacco went up by about 30 percent and of oats by 20 percent. Yields of other crops rose by less than 15 percent. Coffee and tomato yields remained stationary.

Because of price and yield changes during 1950-60, real income per hectare for apples, beans, oranges, barley, sesame, and rice increased by more than 50 percent; for wheat, tobacco, corn, chickpeas, alfalfa, potatoes, and oats by 20 to 40 percent, but by less than 20 percent for peppers, sugarcane, and cotton. Income per hectare for coffee declined by 1.4 percent and for tomatoes by 5.1 percent.

Official support prices have been established for corn, wheat, rice, and beans. These commodities also benefited from technical advances which increased their yields considerably. The net effect has been to assure reasonably adequate returns even to producers of corn and beans on marginal land.

However, unfavorable effects of foreign cotton prices in relation to rising domestic production costs have tended to slow production increases and future changes will depend on political as well as economic considerations.

The projections of output to 1975 assume that no significant changes in relative 1960 prices will occur and that the trends in yields established during 1950-60 will continue. This assumption may be unrealistic for cotton, the price of which has shown a downward trend. Average crop yields are expected to rise by 2.5 percent per year during 1961-70 and by 1.9 percent per year from 1971 to 1975, as crops in which considerable technical progress has already taken place approach productivity ceilings, given the present stage of available technology.

Since in Mexico the possibilities of expanding cultivable lands are very limited, further increase in agricultural output will have to be carried out increasingly through rising yields and a reduction of the proportion of crop losses and of idle lands. This implies an optimum management of scarce water resources for irrigation, a considerable expansion of the application of modern agricultural techniques, and better availability of farm credit. In animal husbandry, it will be necessary to change grazing systems in natural pastures to conserve and improve these lands, to provide for cultivated grasslands, and to increase feed production at least to keep up with the projected rate of growth. In the absence of such programs, the population pressure will expand croplands further, and lead to the misuse of both grazing lands and forests.

COMMODITY PROJECTIONS AND TRADE PROSPECTS

The study report established balances for some 62 agricultural commodities and commodity groups for the base period 1959-61 and projected balances for 1965, 1970, and 1975. The primary purpose of the study was to determine the production and consumption trends. For this reason, each projected year could be taken as a 3-year average. The balances in the study included domestic demand, foreign demand, domestic supply, and trade surplus or deficit.

In this report, 1965 projections are compared with newer available data for 1964-65 and 1965 data are given if consistent with the trend of the period. Commodities are grouped into export, import, and other commodities according to the projections and actual figures for 1964-66. This grouping is rather arbitrary, since the trade position of many commodities has been changing rapidly in recent years. The trade diversification and import substitution policies that have been vigorously pursued during the last two decades have decreased the number of import items and increased the number

of export items. Only the most important commodities are treated in detail here; others are covered in tables 12, 24, and 25.

Export Commodities

Cotton

Cotton is the most important agricultural cash commodity of Mexico. About 65 percent of domestic production is exported. Between 1940 and 1960, output of cotton increased more than six times and the value of exports nearly 40 times. Its share in total agricultural exports of Mexico increased from 5 percent to over 48 percent in the same period, but the export diversification effort reduced this share to about 30 percent by 1965.

Cotton is grown mainly in the North and North Pacific zones. Total output of cotton fiber increased from 71,000 tons in 1940 to 434,000 tons in 1960 and was projected to increase to 525,000 tons by 1965. Actual 1965 data show production of 566,000 tons. The area harvested increased from 277,000 to 815,000 hectares during 1940-60 and the yield from 258 to 532 kilograms per hectare. Since 1960, the area harvested has been relatively stable while yields continued to increase, reaching 722 kilograms per hectare by 1965. The study projected yields of 800 kilograms per hectare by 1975. The projected output for 1975 is 680,000 tons.

In 1960, nearly 90 percent of the cotton produced in Mexico was grown on irrigated lands. This proportion declined to about 70 percent by 1965 and may decline even more. But apart from irrigation, improvement in yields was also due to the use of improved seed, fertilizers, and insecticides. Most of the improved seed has been imported from the United States. The work on developing domestically improved seed varieties for different cotton growing regions has been going on for some time but results so far seem to have been disappointing.

Domestic demand for cotton expanded considerably during 1940-60, reaching 114,000 tons in 1960. Projected demand was 148,000 tons for 1965 and 242,700 tons for 1975. Actual 1965 exports reached 409,000 tons, exceeding the projected 382,000 tons. This was due partly to larger than projected production in 1965 and partly to overestimation of domestic demand.

The overestimation of domestic demand probably hides larger exportable surpluses than shown in the projections--445,000 tons in 1970 and 437,000 tons in 1975. On the other hand, since the proportion of cotton grown on irrigated lands has been decreasing, the projected gains in yields shown in the study may be overstated. Also, the downward trend in international cotton prices may check to some extent future expansion of production. Since these factors cancel each other, exportable surpluses may well follow the projected trend.

Henequen

Another important cash fiber, but on a much smaller scale, is henequen. Nearly 70 percent of domestic production is exported. Between 1940 and 1960 henequen production increased from 95,000 tons to 156,000 tons and the area harvested from 105,000 to 170,000 hectares. Projected production was 158,000 tons for 1965 and 165,000 tons for 1975. The area harvested was projected to increase to 180,000 hectares, with no change in projected yields from the 1959-61 average of 917 kilograms per hectare. Domestic demand was projected to increase from 45,000 tons in 1960 to 54,000 tons in 1965 and 78,000 tons in 1975. Since henequen is increasingly used domestically for sacking, rope, and binder twine in marketing agricultural produce, the exportable surplus declined from 110,000 tons in 1960 to 96,000 tons in 1965, and is projected to decline to

87,000 tons by 1975. This means that in 1975 exports will be 24,800 tons short of the projected external demand of 111,800 tons--a likely development in view of relatively strong domestic demand and a general weakening in foreign demand.

Coffee

Coffee is the second most important cash crop of Mexico. It is a traditional product, whose relative importance in exports has changed little over the last two decades. At present, coffee represents 16 percent of Mexico's agricultural commodity exports. Projections do not imply any change in this proportion.

Coffee is grown mainly in the Gulf and South Pacific zones. In 1960, the States of Veracruz, Chiapas, and Oaxaca produced 80 percent of the total output. Between 1940 and 1960, coffee output more than doubled, from 53,000 tons to 116,000 tons; the area harvested increased from 121,000 hectares to 299,000 hectares. The output per hectare declined from 440 kilograms to 388 kilograms, due to the expansion of cultivation on marginal lands in small farms. The projected output was 142,000 tons for 1965 and 186,000 tons for 1975. The projected harvested area in 1965 and 1975 was 314,000 and 352,000 hectares, respectively, and yields were expected to rise to 452 and 529 kilograms. However, actual production figures since 1960 have been higher than projected, and reached 180,000 tons in 1965 with area harvested of 325,000 hectares.

Coffee exports increased from 23,000 in 1940 to 83,000 tons in 1960 and were projected to increase to 91,000 tons in 1965 and to 108,000 tons in 1975. Actual exports in 1965 were only 80,000 tons. Given domestic demand, this left Mexico with a surplus of over 50,000 tons instead of the projected surplus of only 9,000 tons. Consequently, it seems likely that a further expansion of production from the present level may have to be curtailed to avoid mounting surpluses.

Cacao

The importance of cocoa beans in the Mexican economy is relatively new. Between 1940 and 1960, production grew from less than 1,000 tons to 24,000 tons, while the harvested area expanded from 8,000 to 67,000 hectares. In the same period, yields increased from 179 kilograms to 358 kilograms per hectare. Projected production was 31,000 tons for 1965 and 50,000 tons for 1975. However, actual production in 1965 was much smaller, reaching only 22,000 tons on about the same cultivated area as in 1960. All cacao is grown in the States of Tabasco and Chiapas in the Gulf and South Pacific zones. Nearly half of domestic production is currently exported.

Domestic demand, which has shown a slow upward trend on a per capita basis, was projected to increase from about 20,000 tons in 1960 to 24,000 tons in 1965 and to 40,000 tons in 1975. However, domestic disappearance data for 1965 show only 13,000 tons. Total exports were projected to expand from about 6,000 tons in 1960 to 7,000 tons in 1965 and 8,000 tons in 1975. Actual exports show large fluctuations: 18,000 tons in 1963, 3,300 tons in 1964, and 9,300 tons in 1965. These production and export statistics seem to indicate that the small surplus of supply over total demand shown in the balance sheet for 1975 may not occur. Also, if exports exceed the projected quantity, it will be at the expense of domestic demand.

Sugar

Sugar is the third most important export crop. In 1960, sugar exports accounted for more than 13 percent of total agricultural exports, and represented over 33 percent of domestic production at that time. The Gulf zone contributed 41 percent of the national harvest of sugarcane; the Central zone, 29 percent; the North Pacific, 11 percent; and the North zone, 13 percent.

Between 1940 and 1960, sugar production increased more than fourfold; the area under sugarcane increased more than threefold and yields in terms of sugar output per hectare rose from 3,092 to 4,091 kilograms per hectare. The projections assume that yields will continue to rise at the same rate as in the past, although higher rates are possible through wider application of fertilizers. In 1960, only about 10 percent of cane-growing land was systematically fertilized. Projected output for 1965 was 1,621,000 tons, but actual figures showed 2,349,000 tons, with the area harvested increasing to 464,000 hectares and yields rising to 5,063 kilograms of sugar per hectare.

Domestic demand for sugar was expected to increase from 1,028,000 tons in 1960 to 1,982,000 tons in 1975. Exports were expected to decrease from 462,000 tons in 1960 to 337,000 tons in 1965 and then to increase to 455,000 tons in 1975. Actual export figures for 1965 showed 528,000 tons. At this time, it seems more likely that in 1975 there will be a surplus of sugar over total demand, rather than the projected shortage of 89,000 tons. In view of this, the Mexican Government has taken steps to slow down the growth of production.

Molasses, made of sugarcane, was not discussed in the study report, although it is an important export commodity. Between 1950 and 1965, molasses exports increased from about 150,000 tons to over 556,000 tons, or at the annual rate of 9.8 percent. But future expansions of these exports will probably not be great because of stepped-up interest in using molasses in livestock feed.

Honey

Honey represented nearly 1 percent of total agricultural exports, accounting for over $3 million in 1965. Production was projected to increase from 18,900 tons in 1959-61 to 27,600 tons in 1965 and to 36,800 tons in 1975. Actual production in 1965 reached 30,000 tons. Domestic demand increased from 7,189 tons in 1960 to 9,882 tons in 1965 and is projected to rise to 15,832 tons by 1975. Exports of honey, which varied between 15,000 and 20,000 tons in the past 10 years, increased to nearly 24,000 tons in 1965. If this trend continues, 1975 exports may amount to about 30,000 tons, exceeding the projected domestic surplus of 21,000 tons for that year, and showing an underestimation of production.

Corn

Corn is a staple, consumed daily and grown in all parts of the country. On the average, 9 percent of total harvested area was irrigated, accounting for 13 percent of output.

The study report did not consider corn as an export commodity, even though projections and actual data indicate sizable surpluses for the future. In the past, imports of corn reached a maximum of 817,000 tons in 1957 and then declined rapidly. The first sizable export occurred in 1960 with 457,000 tons. Exports were insignificant in 1961 and 1962, and then rose to 282,000 tons in 1964 and to 1,346,800 tons in 1965. The projected surplus for 1965 was 497,000 tons.

Corn production more than doubled between 1940 and 1960, reaching 6.2 million tons in the latter year. Production in 1965 was 7.5 million tons, following very closely the projected trend. It is expected to be 10 million tons in 1975. The harvested area planted to corn increased from 5.1 million hectares in 1940 to 6.5 million hectares in 1960. The area was projected to increase to 6.9 million hectares in 1965 and then to decrease to 4.4 million hectares in 1975, according to the planned withdrawal of marginal lands from corn cultivation. Actual harvested area in 1965 was 7 million hectares.

Total domestic demand for corn, estimated at 6,076,000 tons in 1960, was projected to increase to 7 million tons in 1965 and to 9,833,000 tons by 1975. Direct per capita consumption was projected to decline from 121.4 kilograms in 1960 to 112.7 kilograms in 1965, and to 101.4 kilograms in 1975. Industrial demand was projected to increase from 441,000 tons to 568,000 and 920,000 tons. The overall surplus was expected to reach 400,000 tons in 1975. As has happened in the past, the study report expects that these surpluses will occur irregularly since corn is cultivated mainly on nonirrigated lands and the harvest is subject to variations caused by climatic conditions. However, unless more stringent crop policies are adopted, these surpluses may be more permanent.

Wheat

The position of wheat as an export commodity is also recent. In the past, imports increased irregularly, reaching the maximum in 1952 with nearly 440,000 tons, but imports had almost ceased by 1957. Sizable exports commenced in 1963 and reached 684,500 tons in 1965. The projected surplus for that year was only 286,000 tons.

Wheat is grown principally in the North Pacific, Central, and North zones. At present about 88 percent of total wheatland is under irrigation. Since 1940, total production has nearly tripled, reaching 1,286,000 tons in 1960. It was projected to increase to 1,890,000 tons in 1965 and to 3,293,000 tons in 1975. Actual 1965 production reached 2 million tons.

The harvested area under wheat increased from 582,000 to 871,000 hectares between 1940 and 1960. It was projected to increase to 957,000 hectares by 1965, but actually decreased to 797,000 hectares. Projections for 1975 showed 1,127,000 hectares. Projected yields were 1,975 kilograms per hectare for 1965 and 2,922 kilograms for 1975. However, actual yields in 1965 reached 2,500 kilograms.

Domestic demand for wheat was projected to increase from 1,286,000 tons in 1960 to 1,604,000 tons in 1965, and to 2,498,000 tons in 1975 with per capita consumption increasing from 33.4 kilograms to 34.9 and 39.3 kilograms in the same period.

The surplus of wheat production over domestic demand was projected to reach 794,000 tons in 1975. However, unless domestic consumption increases faster than projected, the surplus is likely to be larger, due to the rapid gains achieved in applying modern technology to wheat growing.

Recent corn and wheat surpluses have represented a growing problem of adjustment for Mexican economy. At present, facilities for storing them are inadequate and it is costly even to maintain contingency reserves. For the period under consideration, the problem can only be solved by exports. However, since supported internal market prices have been considerably higher than international market prices, costly export subsidies resulted. Consequently, there is an increasing need to change price support policies to avoid excessive surpluses and shift land, particularly irrigated land, to other crops.

Rice

Mexico has been largely self-sufficient in rice. Production and domestic demand projections suggest that the occasional imports of the past may change into exports of up to about 20 percent of domestic output. Production of rice increased from 73,000 tons in 1940 to 203,000 tons in 1960 and to 332,000 tons in 1965. Projected production was 265,000 tons for 1965. Harvested area expanded from 53,000 hectares to 139,000 hectares and to 147,000 hectares (as against the projected 153,000 hectares), respectively, and average yields increased from 1,363 to 1,461 kilograms and to 2,258 kilograms (instead of the projected 1,727 kilograms) per hectare in the same period of time.

About 75 percent of rice output is produced on irrigated lands in the North, North Pacific, and Central zones where yields have shown the fastest increase because of the application of improved seed and fertilizer.

To project the output of rice to 1975, it was assumed that average yields, although already high, will increase to 2,366 kilograms per hectare in 1975, and that harvested area will expand to 208,000 hectares. This increase would require a yearly growth rate of 6 percent, with production of 492,000 tons by 1975. During the same time, domestic demand was projected to increase at 4.6 percent per year, from 209,000 to 402,000 tons, so that an exportable surplus of 90,000 tons was expected by 1975. Actual 1960-65 data suggest that this surplus may surpass the projected figure.

Beef

In 1940, beef accounted for almost 50 percent of the total value of agricultural exports. It has been on the average the fourth most important agricultural export commodity. Its importance, however, is diminishing. By 1950 this share went down to 6 percent, as a result of the aftosa (foot-and-mouth) disease which decimated Mexican cattle between 1946 and 1952, and then increased to about 8 percent by 1965. Beef exports (carcass and live) declined from 79,000 tons in 1940 to 18,000 tons in 1950 and then rose to 76,000 tons in 1960. Projected exports for 1965 were 76,000 tons, but actual exports were only 68,000 tons. About 22 percent of domestic beef production is currently exported.

Beef provides about 63 percent of the total meat supply of Mexico. Cattle raising is spread throughout the country, but is mostly concentrated on natural grasslands in arid States. In 1960, the North zone accounted for 32 percent of total stock of cattle, the Central zone for 23 percent, the Gulf zone for 18 percent, the North Pacific zone for 15 percent, and the South Pacific for 11 percent. The possibility of expanding natural grasslands is very limited in all zones. More promising is the possibility of expanding cultivated pastures, mainly in the Gulf zone, the more so as the productivity can vary from as low as 35 kilograms of meat per hectare on natural grasslands in arid zones to more than 600 kilograms on cultivated pastures.

Between 1940 and 1960 the number of beef cattle increased at an annual rate of 1.6 percent and amounted to 16 million head in 1960. This rate of increase is not expected to change much throughout the projected period to 1975. The low rate of stock increase is caused by low birth rates and high mortality rates for calves as a result of inadequate feeding on poor pastures. Because the rate of stock increase is low, the proportion of cattle entering the market is also low: about 16 percent in 1959-61, projected to increase to 17 percent in 1975. This figure compares with 35 percent in the United States.

Study projections, based on the stock of cattle and average carcass weights, show that the total supply of beef for domestic market would rise from 309,050 tons in 1959-61 to 365,768 tons in 1965 and to 500,123 tons in 1975. However, the actual supply of beef in 1965 reached 374,400 tons. Exports of beef carcasses and live cattle averaged 78,000 tons in 1958-62 and were projected to increase to 87,000 tons in 1965 and to 116,000 tons in 1975. But actual 1965 exports amounted only to about 68,000 tons.

Total domestic demand was projected to increase from 288,000 tons in 1960 to 375,944 tons in 1965 and to 594,303 tons in 1975. On a per capita basis, the projected increase was from 8 kilograms in 1960 to 8.8 kilograms in 1965 and to 9.7 kilograms in 1975. Hence, the projections show a deficit of beef for the domestic market of 10,000 tons in 1965, rising to 95,000 tons in 1975. But according to actual data, apparent domestic disappearance in 1965 was 306,400 tons or about 7.2 kilograms per person. Consequently, although Mexico has been traditionally a beef exporting country, these exports can continue only at the expense of further decrease in domestic per capita

consumption. The export of feeder cattle to the United States is projected to increase to 77,000 tons in 1975, but exports of carcass beef, the external demand for which was projected to increase to 39,000 tons by 1975, will be very hard to meet in view of the growing domestic deficit, reaching 95,000 tons in that year. To avoid this situation a comprehensive livestock development policy is necessary. Some progress has been made in the last few years without, however, basically altering the situation.

Fruits

Mexico exports a great variety of fruits, both in fresh and canned form. The most important are oranges, cantaloups, watermelons, strawberries, pineapples, bananas, and grapes. These exports developed in the last 10 years, except for bananas, whose importance in the total value of agricultural exports decreased from 10.5 percent in 1940 to an insignificant share by 1965.

Since 1940, production of all fruits more than tripled, with a corresponding expansion in harvested area. This means that generally there were no gains in yields. The application of modern techniques to fruit growing has just begun. Notable exceptions are strawberries, where yields increased at a yearly rate of 4 percent between 1950 and 1960, and watermelons which gained 2.8 percent a year in yields. Almost all strawberries and 70 percent of cantaloups and watermelons are grown on irrigated land. The increase in production of fruits to 1975 is projected on the basis of continuous but slow expansion in harvested area at the annual rate of 1.1 percent and a moderate increase in yields at the annual rate of 0.8 percent. Recent data, however, show that actual production of fruits is rising much faster than that projected, due to expansion of fruit growing on irrigated lands and faster increase in harvested area.

In 1960, oranges represented 24 percent of the total value of fruit production in Mexico and 1.3 percent of the value of agricultural exports. Total production was 738,000 tons and was projected to increase to 798,000 tons in 1965 and to 950,000 tons in 1975. Actual production in 1965 reached 865,000 tons. Aggregate domestic demand was projected to increase from 715,000 tons in 1960 to 894,000 tons in 1965 and 1,493,000 tons in 1975. The exportable surplus of 24,000 tons in 1960 was projected to turn into a deficit of 95,000 tons in 1965 and 542,000 tons in 1975. In 1965, however, Mexico exported 79,000 tons, instead of the projected 35,000 tons, showing that effective domestic demand is much smaller than projected demand. Projected exports of oranges for 1975 were 47,000 tons, but are likely to be larger, given the present trend in production.

Next in importance, bananas represented 18 percent of the total value of fruit production in 1960, but only 0.3 percent of the value of agricultural exports. Total production in 1960 was 597,000 tons; this was projected to increase to 700,000 tons in 1965 and to 947,000 tons in 1975. Actual 1965 production was 779,000 tons. Domestic demand was projected to increase from 574,000 tons in 1960 to 707,000 tons in 1965 and to 1,198,000 tons in 1975. In 1965, production approximately equaled demand, allowing export of a small quantity. A deficit was projected for 1975 of 251,000 tons, but since actual production is increasing faster than projected it may meet domestic demand.

In 1960, watermelons and cantaloups together represented about 10 percent of the total value of fruit production and 1 percent of the value of agricultural exports, although exports of these fruits have been increasing. Production in 1960 was 233,000 tons, and was projected to increase to 266,000 tons in 1965 and to 344,000 tons in 1975. Actual production in 1965 was about 580,000 tons. Aggregate domestic demand was projected to increase from 165,000 tons in 1960 to 212,000 tons in 1965 and to 346,000 tons in 1975. Although 1965 exports amounted to 97,000 tons instead of the projected 70,000 tons, domestic disappearance proved much bigger than projected domestic demand, making up for deficits in other fruits. The study projected a near balance for these fruits for 1975; but, if the trends present continue, actual exports in 1975 will be much larger than the projected 80,000 tons.

Strawberry exports have been advancing faster than those of any other fruit. Production increased from about 1,000 tons in 1940 to 23,000 tons in 1960 and was projected to increase to 26,000 tons in 1965 and to 34,000 tons in 1975. However, actual production in 1965 was 39,000 tons. Domestic demand was projected to increase from 12,000 tons in 1960 to 17,000 tons in 1965 and to 29,000 tons in 1975. Exports in 1965 were 23,500 tons, as against the projected 15,000 tons for that year, and are likely to be much higher in 1975 than the projected 18,000 tons.

Other fruits, the most important of which are grapes, avocados, mangoes, apples, pears, and pineapples, do not figure heavily in exports. In the past, increases in production of these fruits were just a little slower than the increase in population, except for pineapples, whose production expanded at the annual rate of 7.6 percent a year. Since these trends were not projected to alter significantly, supply was expected to fall short of demand. By 1975, deficits were expected to reach 43,000 tons for avocados, 80,000 tons for mangoes, 54,000 tons for apples, 9,000 tons for pears, and 138,000 tons for pineapples. The study projected a surplus only for grapes--nearly 17,000 tons in 1975. However, more recent data indicate faster growth rates in production of these fruits than the rates projected, because of the availability of land, the increase in irrigation, and the high prices received for these crops. It seems doubtful, therefore, that most of these deficits will occur. On the contrary, increased quantities of these fruits for export may be expected.

Tomatoes

One of Mexico's traditional export commodities is tomatoes. Their share in the total value of exports increased from 2.3 percent in 1940 to 4.6 percent in 1965. In 1965 about 33 percent of the crop was exported.

Over 70 percent of the tomato crop is grown on irrigated land. Between 1940 and 1960, production increased from 96,000 tons to 405,000 tons, and the harvested area expanded from 22,000 to 63,000 hectares. Yields increased at an annual rate of 2 percent. Output was projected to increase to 458,000 tons in 1965 and to 570,000 tons in 1975 due to the expansion of harvested area and a further increase in yields. Actual production in 1965 was 490,000 tons. Given the projected increase of domestic demand to 346,000 tons in 1965 and 537,000 tons in 1975, the exportable surplus projected for 1965 was over 112,000 tons and about 33,000 tons in 1975. However, actual exports in 1965 amounted to 161,000 tons. At the present rate of increase in production, exports should be much higher in 1975 than the projected amount.

Other Vegetables

Mexico exports a variety of other vegetables. The principal ones are fresh onions; fresh, canned, and dried peppers; fresh cucumbers; fresh and dried garlic; and green peas. These crops were largely cultivated on irrigated land in 1960; 86 percent of the garlic, 71 percent of the onions, and from 50 to 60 percent of the other vegetables. Between 1950 and 1960, their aggregate output rose 2.5 percent annually, mostly due to an increase in the cultivated area. The only substantial increase in yields occurred in the case of garlic, about 3.2 percent per year, because of imports of improved seed.

In projecting future production of vegetables, it was assumed to be possible to increase harvested area 1.7 percent and yields 0.6 percent annually. This would increase the combined output of the five vegetables by about 1.4 times between 1960 and 1975. This increase was not expected to be sufficient to meet domestic demand and shortages were projected to occur in all five commodities after 1970. However, data since 1960 indicate that actual vegetable production expanded faster than that projected, for similar reasons as in the production of fruits. As a result, Mexico may be expected to have increasing quantities of vegetables for export.

Dry Beans

Over the last 15 years Mexico has been largely self-sufficient in dry bean production, although beans have been occasionally imported to meet deficits or exported to eliminate surpluses.

In 1960, the North zone contributed 33 percent of the country's bean production; the Central zone, 32 percent; and the other three zones, 35 percent. A large amount of the Mexican bean crop is interplanted with other crops; nearly all in the Central zone and from 22 percent to 50 percent elsewhere. Yields can vary from 295 kilograms per hectare in mixed cultivation on nonirrigated lands to 805 kilograms per hectare in single-crop cultivation on irrigated lands. Only 7 percent of area harvested in 1960 was under irrigation.

Between 1940 and 1960 the area harvested under beans increased from 859,000 hectares to 1,651,000 hectares, average yields per hectare increased from 209 kilograms to 421 kilograms, and total output from 179,000 tons to 611,000 tons. Projected production for 1965 was 723,000 tons, but reached 903,000 tons.

Assuming that the harvested area can be expanded to 2 million hectares by 1975 and yields can further be increased at the rate of 2.1 percent per year, the exportable surplus, which was 33,500 tons in 1965, is projected to increase to over 182,000 tons in 1975. Since production in 1963-65 surpassed the projected trends, the surplus seems likely to be larger even if domestic demand increases faster than projected.

Chickpeas

Chickpeas are a traditional Mexican export crop, but of diminishing importance. Total exports, which averaged 15,000 tons in the early 1950's, declined to 4,700 tons in 1960 and then rose to 8,237 tons in 1965.

In 1960, 76 percent of the production of chickpeas came from the Central zone, where it was cultivated on rainfall lands, and 20 percent from irrigated lands of the North Pacific zone. Three-fourths of the crop is used as poultry feed. Exported chickpeas are for human consumption.

The application of new techniques to chickpea growing is done on a small scale only and these conditions are not expected to change much. Harvested area was projected to increase from 150,000 hectares in 1960 to 195,000 hectares in 1975, and yields from 811 to 881 kilograms per hectare. Output was projected to increase from 121,000 tons in 1960 to 136,000 tons in 1965 and to 172,000 tons in 1975. Since 1960, actual production has remained below the projected production; it was 105,000 tons in 1965. Domestic demand was projected to increase from 114,000 tons in 1960 to 154,000 tons in 1965 and 270,000 tons in 1975. In view of the actual exports, domestic demand seems to have been smaller than projected. Nonetheless, future deficits are likely to grow and to surpass the projected 98,000 tons for 1975.

Import Commodities

Wool

Apart from rubber, which is not discussed in the study report, wool is the most important agricultural import commodity. In 1959-61 domestic production amounted to about 4,400 tons and imports to 6,830 tons. Domestic availability was thus 11,230 tons. Demand was projected to increase to 14,178 tons in 1965 and to 23,748 tons in 1975. Domestic production, based on the projections of the stock of sheep, was expected to

expand to 4,800 tons in 1965 and to 5,700 tons in 1975. The resultant deficit was projected at 9,386 tons in 1965, growing to 18,020 tons in 1975. Actual production in 1965 was 5,900 tons and 14,000 tons were imported, indicating underestimation of domestic demand.

Hides and Skins

Production of beef hides and skins in 1959-61 amounted to 56,700 tons and imports to 14,100 tons; 70,800 tons were available. Domestic demand was expected to increase to 87,649 tons in 1965 and to 138,224 tons in 1975. Production, based on the projection of slaughter of beef cattle, was expected to increase to 65,800 tons in 1965 and to 88,400 tons in 1975, with a deficit of 21,874 tons and of 49,826 tons in the respective years. Actual imports in 1965 amounted to 28,400 tons, suggesting again a faster increase in domestic demand than that projected.

Milk

the production of milk in Mexico increased nearly threefold between 1940 and 1960, from 1,320,000 tons to 3,724,600 tons. It was projected to rise to 4,489,000 tons in 1965 and to 6,645,300 tons in 1975. However, actual production in 1965 reached only 3,903,000 tons.

The projections were based on the assumption that the stock of milk cows would follow the 1950-60 trend and increase from 6.9 million head in 1960 to 8.4 million head in 1975, and that the average yield would increase from 508 liters to 758 liters per cow.

Total demand was expected to expand from 3,726,000 tons in 1960 to 4,655,000 tons in 1965 and to 7,284,000 tons in 1975. Consequently, the supply deficit was projected to rise to 165,000 tons in 1965 and to 639,000 tons in 1975. Since, however, the actual 1965 production was smaller than expected, the deficit for that year reached 752,000 tons. This accounts for the rapidly growing imports of milk, mostly in canned and powdered form. Should these trends continue, imports of milk in these forms in 1975 may be expected to be much larger than the projected 639,000 tons of fresh milk equivalent.

Feed Grains

Feed grains, except corn, are traditionally imported by Mexico and are likely to remain in this category over the projected period since demand continues to grow faster than domestic production. Between 1950 and 1960, the production of barley rose at an annual rate of 0.7 percent from 162,000 tons to 178,000 tons; oat production rose 2.5 percent annually, from 56,000 tons to 72,000 tons. Both grains are grown in regions of low and irregular rainfall, and the application of improved techniques to their cultivation is recent. Imports of barley, although irregular, were 51,800 tons in 1960, jumping to an all-time high of 87,500 tons in 1965. The projected deficit for 1975 is 69,600 tons, but is likely to be higher. Imports of oats, also irregular, reached a maximum of 8,300 tons in 1956 and then declined to 1,900 tons in 1964. By 1975, the deficit is expected to rise to some 12,000 tons.

Sorghum grain is a relatively new product in Mexico; its cultivation was introduced in the early 1950's. By 1959-60, production amounted to 226,000 tons. Projected production for 1965 was 293,000 tons, but actual production reached 510,000 tons. This rapid increase is due to the fact that sorghum is largely grown on irrigated land and has benefited from the application of fertilizers, improved seeds, and mechanization. Production is not sufficient to meet domestic demand and in 1965 imports of sorghum grain amounted to 17,000 tons. This deficit was projected to increase to 62,200 tons, and more recent data corroborate the projected trend.

Fats and Oils

This group comprises cottonseed, sesame, peanuts, safflower, copra, oil-palm kernels, flaxseed, and soybeans. Of these, Mexico has been exporting sizable quantities of cottonseed feed products, such as cake, meal, and hulls, with an average annual value of over $5 million; the highest was $9.2 million in 1955. The value of peanut exports rose to $5 million (23,800 tons) in 1955 and then gradually declined to a little under $2 million (9,200 tons) in 1965. The production of other oilseeds has been falling short of domestic demand and their imports (at 1959-60 prices) rose from about $72,000 in 1939-41 to $200,000 in 1949-51, declined to $128,000 in 1959-61, and then rose steadily to $550,000 in 1965. Soybeans and flaxseed accounted for most of this amount. Deficits in domestic supply of oilseeds were projected to increase substantially, despite important gains in output; between 1950 and 1960 these gains averaged about 3.3 percent a year. The area harvested increased from 134,000 hectares in 1940 to 448,000 hectares in 1960.

For the group, total output is projected to increase at an annual rate of 3.2 percent and total demand at 4.2 percent. Consequently, supply deficits were projected for cottonseed, sesame, peanuts, safflower, copra, oil-palm kernels, flaxseed, and soybeans, amounting altogether to 403,000 tons in 1975, more than seven times higher than actual imports in 1965. This quantity reflects a deficit of 122,000 tons in crude oil equivalent. Data since 1960 seem to support projected trends for oilseed production and imports, though not to the extent of the projected deficit, owing to wider expansion of soybean production than was projected.

Other Commodities

The other commodities included in the study are potatoes, sweetpotatoes, tobacco, pork, mutton and lamb, goat meat, poultry, and eggs. Despite substantial gains in production achieved in the past 2 1/2 decades, some deficits are foreseen because of the rapidly expanding domestic demand.

The projected deficits for 1975 are of the following order: Potatoes and sweetpotatoes, 32,000 tons; leaf tobacco, 28,000 tons; pork, 113,000 tons; and goat meat and poultry, 16,000 tons each. Projections indicate a small surplus of 3,000 tons for mutton and lamb, but actual data for 1960-65 show that the projection may not be realized because of slowing production. Instead, there may be a deficit of some 15,000 tons. The production of tobacco has also been slower than projected for recent years. Only production of eggs was projected to approximate domestic demand. Recent data seem to support this view.

It is, however, doubtful whether these deficits will be translated into imports of any substantial quantity. It is more likely that adjustment will be made on the side of domestic demand. This is particularly true for tobacco; imports have been severely curtailed by Mexican policy and exports are encouraged. The projected increase in per capita consumption from 2.01 to 2.53 kilograms per year, which leads to a 28,000-ton deficit in 1975, is probably excessive and exports are likely to continue to increase.

Mexico accounts for about 4 percent of U.S. exports and for 3.3 percent of U.S. imports. U.S. exports to Mexico increased from an average of $476 million during 1945-49 to $1,056 million in 1965, while imports from Mexico increased from the average of $234 million to $627 million in the same period. Since 1960, agricultural products have accounted for approximately 8 percent of U.S. exports to Mexico and about 45 percent of U.S. imports from Mexico. However, the value of U.S. agricultural exports to Mexico has declined since the 1950's, due principally to Mexico's self-sufficiency in staple crops, such as corn, wheat, and beans (table 26).

Regulation of Foreign Trade

Mexican trade policy is protectionist. Restrictions on imports are designed to encourage and protect domestic producers, to direct investment into the economic sectors that require increased production, and to assure that scarce foreign exchange is utilized for imports which the Government of Mexico considers essential. Major objectives of this policy are import substitution by domestic products and geographic diversification of foreign trade, both of which are strongly emphasized.

Import substitution reflects Mexico's desire to achieve maximum self-sufficiency. Instruments used to implement this objective are import licensing, tariff barriers, enforced industrialization, and Government purchasing policies, trade payments, and compensation agreements. Because of this policy, Mexico does not belong to the General Agreement on Tariffs and Trade (GATT). On Mexican initiative, the Mexico-United States Trade Agreement of 1942 was terminated in 1950. The two countries therefore have no contractual agreement under which trade problems can be discussed, but they do have formalized bilateral meetings annually to discuss trade problems.

Import licenses are Mexico's principal and most effective means of controlling imports. The licensing agency is the Directorate General of Commerce of the Ministry of Industry and Commerce. Applications for licenses for controlled items are referred by the Ministry to import committees and advisory groups for recommendations. Each committee may have quotas for total imports, depending upon foreign exchange availabilities and the need for the products. A substantial number of regular Governmental committees and advisory groups screen import license applications. The committees and groups are composed of Government officials, industry representatives, and representatives of import and trade associations. Some products are subject to controls of other agencies, even though the Directorate may issue the actual permit. Most agricultural and forestry products are controlled by the Ministry of Agriculture. Some products, such as powdered milk, require the authorization of an interministerial committee.

The import licensing controls apply equally to all countries except those in the Latin American Free Trade Association (LAFTA). At present, about 65 percent of total imports are subject to import licensing and the number of items subject to licensing is increasing. So, imports of consumer goods have been declining in recent years, while those of producer goods have been increasing.

Import substitution is also an important element in the Government's National Frontier Program, initiated in 1961, which is intended to rehabilitate towns on the Mexico-United States border and to integrate them better within the Mexican economy. These border towns have traditionally depended heavily on U.S. sources of supply.

Measures taken by the Government to assist Mexican suppliers in shipping their goods to the border areas include the granting of subsidies on railway freight rates and rebates on the Mexican Federal sales tax.

The Mexican public sector accounts for about 18 percent of total imports. License applications for these imports are screened by the import committee of the Banco Nacional de Comercio Exterior, S.A., which usually requires the Government to buy domestically.

The import tariff is another tool for limiting imports, but is considered less effective and, therefore, is less significant than import licensing controls. Combined import duties and taxes average 14 percent of total import value. Imports of very few items are prohibited completely, and few items are on the free list. Duties are both specific and ad valorem. To combat undervaluation of invoice prices, officially fixed prices apply to all imports except those from LAFTA countries. In assessing ad valorem duties, customs officials use whichever price is higher. Sanitary certificates are required for animals and animal products, seeds, plants and their products, and similar items. Packaged food products must be registered with the Ministry of Health and the registration renewed annually.

Geographic diversification reflects a desire to develop other markets and sources of supply than the United States, which supplied Mexico with 66 percent of its total imports in 1965. It applies to both exports and imports. Since Mexico still regards itself as a raw materials producer and exporter, it attempts to diversify both the destination to which products are exported and the kinds of products exported. This does not mean a forced displacement of traditional buyers and suppliers, but rather a persistent effort to obtain better terms in various markets.

Mexico has two active free ports and four free zones. The free ports are administered by the autonomous government agency, Puertos Libres Mexicanos. They are Coatzacoalcos (Puerto Mexico) in Veracruz State, and Salina Cruz in Oaxaca State. Salina Cruz is used to only a small extent. Products may be processed in free ports. The free zones are the State of Baja California, North; the Territory of Baja California, South; Sonora State; and the Territory of Quintana Roo. These are free zones mainly because of their distance from domestic suppliers, and imported products are consumed rather than processed there. Many items, mostly consumer goods, may be brought into the free zones without the payment of tariff duty. However, they are subject to normal duties if sent from the zones into the rest of Mexico. As domestic transportation and supply improve, products are gradually removed from the free list.

Mexico has most-favored-nation bilateral trade agreements with 19 countries and a payments agreement with Spain. The same most-favored-nation treatment is extended to other nations with which Mexico trades, except those in LAFTA who get preferential treatment. Most of these agreements are very general. They do not channel trade nor provide for duty reductions, but some list products that are to be promoted under the bilateral agreements.

Mexico, Argentina, Brazil, Chile, Paraguay, Peru, and Uruguay joined LAFTA by the Treaty of Montevideo in 1960. Colombia and Ecuador joined in 1961, Venezuela in 1966, and Bolivia in 1967. The purpose of the treaty is the liberalization of trade among member countries. National lists, negotiated in 1961, 1962, 1963, and 1964, established schedules of concessions that each member country agreed to give to the other. As a result of the first three national list negotiations, tariffs were reduced by more than 30 percent on some 8,000 items. The conferences of 1964, 1965, and 1966 renegotiated some items and added 362 new items, bringing the list up to 9,393 items. The 1964 conference also created the first multilateral common list of some 175 items on which duties were to be eliminated by 1973. The common list is a schedule of products on which the member countries agree collectively to eliminate duties and other import

restrictions. At the OAS meeting of the 20 Chiefs of State in April 1967, it was agreed to establish a completely free intra-LAFTA trade by 1985 and a common external tariff. As a result, there has been a substantial increase in Mexico's total trade with other LAFTA countries. However, Mexico's economic development planning has not been much affected by the possibilities of LAFTA as a regional economic development organization.

Competition from Other Suppliers

An analysis of Mexican trade data reveals that the U.S. share of the Mexican market, which reached almost 90 percent towards the end of World War II, had declined to 66 percent in 1965. This was the result of the return of the world to a more normal trade pattern and a measure of the success of Mexico's drive towards geographical diversification of its trade. However, Mexican imports from the United States increased from $476 million in 1945-49 to $808 million in 1955-59, an annual rate of 5.5 percent. During the 1960's, this rate dropped to 2.1 percent (table 26).

During the same time, Mexico's exports to the United States as a share of total Mexican exports declined from 78 percent in 1949-51 to 63 percent in 1965. This represents an increase from $234 million to $530 million.

Thus, Mexico is becoming an increasingly competitive market. Because it is one of the most stable and rapidly expanding countries in Latin America, and is free of foreign exchange controls, its market is being cultivated by Western Europe, Japan, and more recently, LAFTA countries. Between 1949-51 and 1965, the following countries increased their shares of the Mexican market by the percentages shown: West Germany, 1.5 to 7.8 percent; the United Kingdom, 2.2 to 3.4 percent; France, 1.4 to 3.1 percent; Italy, 0.6 to 2.8 percent; Japan, 0.2 to 2.5 percent; and LAFTA countries, 0.4 to 1.9 percent (table 27).

Similarly, as percentages of total Mexican exports, between 1949-51 to 1965 sales to Japan increased from 0.6 to 8.1 percent; to Switzerland, from 0.4 to 2.7 percent; and to LAFTA countries, from 2.0 to 4.4 percent.

Mexico's importance as a market for U.S. agricultural products declined as others' shares rose, although to a lesser extent. The United States supplied nearly 80 percent of Mexico's agricultural imports in 1960, but only 71 percent in 1965. Although LAFTA countries increased their agricultural exports to Mexico and will no doubt continue to increase them, the decline in the U.S. share results mainly from two factors, neither of which is the result of competition: The end of large U.S. shipments of corn and wheat to Mexico when it began producing surpluses of these grains; and a large increase in the value of Mexican imports of wool from Australia--from $10 million in 1960 to $23 million in 1965. A less significant but a contributing factor is Mexico's decrease in the imports of animal fats, from over $8 million--about 80 percent of which came from the United States--in the mid-1950's to $1.1 million in 1965. By 1965, the U.S. share in this declining amount dropped to 44 percent, while the share of the United Kingdom increased from 9 percent in 1960 to 25 percent in 1965, and the share of Argentina increased from zero to nearly 18 percent.

In other agricultural products, the United States is maintaining its position in the face of increasing competition. But the United States, with its advantages of geographical proximity to Mexico, fast delivery, low transportation costs, and technical assistance, will have to face increasingly stronger competition from LAFTA countries in the field of pricing.

U.S. Imports from Mexico

U.S. imports of agricultural products from Mexico have been steadily growing in quantity and value. They increased from $98 million in 1945-49 to $276 million in 1965, or at an annual rate of about 6 percent. As a percentage of total U.S. agricultural imports, the increase was from 3.8 percent to 6.8 percent in the same period (table 28).

The main items imported are coffee, livestock and meat, cane sugar, and fruits and vegetables. In 1955, coffee accounted for 54 percent of all agricultural imports, livestock and meat for 12 percent, fruits and vegetables for 8 percent, and cane sugar for less than 1 percent, altogether 75 percent of all agricultural imports from Mexico. By 1965, imports of coffee decreased to 24 percent of the total, while those of fruits and vegetables increased to 25 percent, cattle and meats to 20 percent, and cane sugar to 19 percent.

Other imported commodities are cocoa beans, bananas, spices, vegetable oils and fats, unmanufactured tobacco, and hides and skins. The value of imports of unmanufactured tobacco increased from $12,000 in 1955 to $1,405,000 in 1965 and of hides and skins from $4,000 to $45,000. Imports of other commodities in this group, all representing less than 2 percent of U.S. agricultural imports from Mexico, declined.

The study supply and demand projections show that the best prospects for further expansion of imports from Mexico seem to be for fruits and vegetables. The study forecasts surpluses above domestic demand, particularly for tomatoes, strawberries, cantaloups, and grapes. Considerable surpluses are also projected for coffee, cocoa beans, and sugar. Finally, despite a growing shortage of meat in Mexico through 1975, as projected by the study, the value of Mexican imports of cattle will probably remain at the present level of about $25 million, representing over 500,000 head, but imports of carcass meat will almost certainly decline from the present value level of about $30 million.

U.S. Exports to Mexico

Mexico at present is a producer goods market. This fact, together with the progress achieved by the country in crop production and the continuous effort to develop sources of supply other than the United States, does not make Mexico an expanding market for U.S. agricultural products. As a result, while total U.S. exports to Mexico grew during 1950-65 at an annual rate of 2.8 percent, agricultural exports have declined at the rate of 1.7 percent (table 26). But since import substitution items on the Mexican imports list have been largely exhausted, further decline in U.S. agricultural exports will probably not occur; rather a modest increase may be expected.

In value terms, U.S. agricultural exports declined from $78 million in 1955-59 to $68 million in 1960-64, but rose again to $87 million in 1965 (tables 29, 30). This trend reflects a drop in major exports--feed grains, vegetables, vegetable fats and oils, oilseeds, and animal fats, which was more than offset by gains in exports of oilcake and meal, fruits, hides and skins, and dairy products. These trends continued in 1965, except for a drastic drop in U.S. exports of wheat and wheat flour and an even more drastic increase in exports of vegetable fats and oils. During the last 5 years Mexico also diminished its imports of sorghum grain, fresh fruit, fresh and processed milk, seeds, and meats and meat products. The United States has been almost the sole supplier of the first three products in this group. In the last 5 years, U.S. sales to Mexico averaged $3.3 million per year for sorghum, over $1.1 million for fresh fruits, and $7.8 million for milk. Since 1964, Canada has shipped to Mexico small but

increasing quantities of sorghum. In the last 5 years, the value of Mexican imports of U.S. meat and meat products averaged $1.4 million, representing about 70 percent of the value of Mexico's imports in this group; imports of seeds averaged $5.5 million, representing about 94 percent of the value of Mexico's seed imports. Except for fresh fruits, the decline in Mexico's imports of these commodities does not seem to be permanent, barring unforeseen changes in Mexican agricultural policy. The study projections indicate increasing shortages which, by 1975, may amount to 69,000 tons for sorghum, 639,000 tons for milk, and 224,000 tons for meats.

Mexican imports from all sources of other principal agricultural commodities have been rising, although at a slow pace. In this group, the U.S. share has been increasing for oilseeds, vegetable fats and oils, hides and skins, and tobacco, and has remained stable for barley and processed animal feed.

In the last 5 years, annual Mexican imports of U.S. agricultural commodities averaged as follows: Oilseeds, $0.6 million; vegetable fats and oils, $3.4 million; hides and skins, $5.6 million; tobacco, nearly $5.9 million; barley (grain and malt), $3.5 million; and animal feed, over $5.9 million. These figures represent the following shares of total Mexican imports of these commodities: 99.8 percent of oilseeds; 66.4 percent of vegetable fats and oils; 98.7 percent of hides and skins; 98.1 percent of tobacco; 99.3 percent of barley; and 96.1 percent of animal feed. The study report projects growing shortages in all these commodities. However, a further increase in the imports of tobacco above the present level cannot be expected.

The final group of commodities are those whose imports by Mexico are rising, but the U.S. share in these imports is falling due to competition--breeding cattle, baby chicks, oats, and hops. Over the last 5 years, annual Mexican imports of U.S. breeding cattle averaged nearly $3.7 million but the U.S. share in the Mexican cattle market fell from 91 percent in 1960 to 83 percent in 1965, due to increasing imports from Canada. Imports of U.S. baby chicks averaged about $1 million during the last 5 years. Although the U.S. share in this commodity market is still about 99 percent, imports from Canada are increasing. Mexican imports of U.S. oats have averaged about $305,000, but between 1960 and 1965, the U.S. share of this market declined from 100 to 89 percent due to growing imports from Argentina and, to a lesser extent, from Canada. Finally, Mexican imports of U.S. hops have averaged over $1.9 million, with the U.S. share in Mexican hops market declining slightly from 99 to 98 percent, due to imports from Germany and Yugoslavia. The study results indicate a continuation of import demand for cattle and oats because of the increasing insufficiency of meat production in Mexico.

Table 1.--Growth and structure of population in Mexico for 1940, 1950, and 1960, and projections to 1965, 1970, and 1975

Item and unit	Actual			Projected			Average annual rate of growth			
	1940	1950	1960	1965	1970	1975	1941-1950	1951-1960	1961-1970	1971-1975
							-Percent-			
Total population 1/ (1,000 persons)	19,654	25,791	36,003	42,808.8	51,086	60,892	2.8	3.1	3.6	3.6
Urban 2/	6,896	10,983	18,254	23,675.9	30,488	38,702	4.8	4.9	3/ 5.3	4.9
Rural	12,758	14,808	17,749	19,132.9	20,598	22,190	1.5	1.5	3/ 1.5	1.5
Males (thousands)	9,696	12,697	17,968	21,433.1	25,650	30,650	2.7	3.2	3/ 3.6	3.6
Less than 15 years (%)	42.66	43.04	46.62	47.42	47.73	47.39	..	..	..	..
15 to 64 (%)	54.39	53.54	50.08	49.33	49.00	49.36	..	..	..	..
65 and over (%)	2.95	3.42	3.30	3.25	3.27	3.25	..	..	..	..
Females (thousands)	9,958	13,094	18,035	21,375.7	25,436	30,241	2.8	2.9	3/ 3.5	3.5
Less than 15 years (%)	39.77	40.40	44.39	45.36	45.80	45.80	..	..	..	..
15 to 64 (%)	57.17	55.94	52.06	51.14	50.64	50.60	..	..	..	..
65 and over (%)	3.06	3.66	3.55	3.20	3.56	3.60	..	..	..	..
Population ratios:										
Birth rate per 1,000	44.3	45.5	46.0	44.4	42.6	40.7	..	..	..	..
Death rate per 1,000	23.2	16.2	11.5	9.9	7.5	6.7	..	..	..	..
Natural rate of growth per 1,000	21.1	29.3	34.5	34.5	35.1	34.1	..	..	..	..
Gross rate of reproduction 4/	n.a.	n.a.	3.159	3.159	3.159	2.444	..	..	..	..
Life expectancy (years):										
Males	37.0	47.9	57.6	62.7	63.8	65.7	..	..	..	..
Females	39.8	51.5	60.3	65.2	66.5	68.5	..	..	..	..
Labor force 5/ (1,000 persons)	5,858	8,272	11,224	13,330.4	15,768	18,704	3.5	3.1	3.5	3.5
Crop & livestock activities (%)	65.4	58.3	54.1	49.2	44.8	40.8	2.3	2.4	1.5	1.5
Industry (%)	12.7	16.0	19.0)	50.8	55.2	59.2	5.9	5.0)	5.4	5.0
Services (%)	21.9	25.7	26.9)				5.2	3.6)		
Economically active population (% of total)	n.a.	32.36	31.26	31.22	30.95	30.80	n.a.	3.0	3.5	3.5

1/ 1940 and 1950 data from Population Censuses; 1960, Population Census, as corrected by Raúl Benítez Zenteno and Gustavo Cabrera Acevedo for underenumeration in the 0-4 age group and adjusted in the 5-9 age group. The official figure for 1960 is 34,923,129, of which 17,705,118 was reported as urban population and 17,218,011 as rural. Projections to 1970 and 1975 by R. Benítez and G. Cabrera. 2/ Number of people living in centers of 2,500 or more inhabitants. 3/ Rates of growth derived from official censuses. 4/ Expresses the replacement ratio of 1 generation of females by the next, assuming fertility remains unchanged and mortality of mothers is nil until the end of their fertile period (10-49 years). 5/ The labor force differs from the economically active population by the number represented as unemployed during 13 or more weeks. Projections to 1970 and 1975 are preliminary.

n.a. = not available. .. = not applicable.

Source: Study report, tables I-1, I-7, and III-13.

Table 2.--Selected indicators of economic growth in Mexico, actual 1950-60, 1963, and 1965, and projections to 1965, 1970, and 1975
(Percentage shares and rates of growth calculated in values at 1960 prices)

Indicators	Units	Actual				Projected			Average rate of growth			
		1950	1960	1963	1965	1965	1970	1975	1951-60	1961-65	1961-70	1971-75
									Percent			
Gross domestic product, GDP. . . .	million dollars	6,838	12,479	14,462	16,743	16,307	22,348	31,345	6.2	6.1	6.0	7.0
Agriculture 1/	percent	20.0	16.6	15.9	17.4	15.4	14.4	13.1	4.2	6.0	4.5	5.0
Industry	percent	28.9	31.4	32.2	35.1	32.7	33.6	35.1	7.0	8.4	6.7	8.0
Services	percent	51.1	52.0	51.9	47.5	51.9	52.0	51.8	6.4	4.3	6.0	7.0
Per capita GDP	dollars	265	346	362	392	381	437	514	3.0	2.5	2.3	3.3
Urban 2/	dollars	498	568	574	587	583	627	704	1.4	0.7	1.0	2.3
Rural 2/	dollars	93	117	124	149	131	156	185	2.3	2.4	2.9	3.5
Aggregate consumption 3/	million dollars	5,773	10,921	12,533	14,292	14,029	18,808	25,889	6.6	5.5	5.6	6.6
Per capita consumption	dollars	218	303	314	334	327	368	425	3.3	2.0	2.0	2.9
Aggregate supply	million dollars	7,799	13,947	16,065	18,681	18,068	24,564	34,214	6.0	6.0	5.8	6.8
GDP 4/	percent	87.7	89.5	90.0	89.7	90.2	91.0	91.6	6.2	6.1	6.0	7.0
Imports of goods & services. . . .	percent	12.3	10.5	10.0	10.3	9.8	9.0	8.4	4.3	5.6	4.2	5.3
Exports of goods & services. . . .	percent	11.1	9.5	10.0	9.6	9.8	9.1	8.4	4.4	6.3	5.3	5.1
Gross fixed investment	million dollars	1,162	1,697	1,920	2,590	2,252	3,519	5,459	3.9	8.8	7.6	9.2
Public	percent	51.2	43.8	47.2	39.6	47.7	48.0	48.0	2.2	6.6	6.6	9.2
Private.	percent	48.8	56.2	52.8	60.4	52.3	52.0	52.0	5.3	10.5	6.7	9.2
Ratio of investment to GDP 5/. . .	percent	17.0	13.6	13.3	15.4	13.8	15.8	17.4	..	..	..	..
Net fixed investment	million dollars	718	989	1,276	n.a.	1,546	2,507	4,063	4.0	n.a.	8.9	10.1
Reducible tangible capital in fixed assets	million dollars	18,131	26,196	29,621	n.a	32,969	43,005	59,911	3.7	n.a.	5.1	6.9
Marginal output capital ratio. . .	- - -	1.8	1.13	0.80	n.a.	0.74	6/0.62	6/0.54	0.4	n.a.	- 5.8	- 2.7
Elasticity of capital productivity	- - -	2.77	2.26	1.57	n.a.	1.41	1.11	0.96	- 2.0	n.a.	- 6.9	- 2.9
Capital per person employed 7/ . .	dollars	2,212	2,334	2,363	n.a.	2,464	2,727	2,203	0.6	n.a.	1.6	3.3
Product per person employed 7/ . .	dollars	826	1,112	1,154	n.a.	1,225	1,417	1,673	3.0	n.a.	2.5	3.4

1/ Includes crops, livestock, forestry, and fisheries. 2/ Estimates based on GDP per capita in agricultural sector. 3/ Includes changes in inventories. 4/ Excluding factor income. 5/ Assuming investment in inventories is approximately 3 percent of GDP, the ratio of gross domestic investment would be higher by this percentage. 6/ Indicates productivity in the following year of capital existing and investment made this year. 7/ Projections to 1965, 1970, and 1975 assume labor force increase at 3.5 percent per year.

n.a. = not available. .. = not applicable.

Sources: Study report, tables I-1, I-2, I-5, and I-6. For 1965 actual: AID Data Book, March 1967; Economic Survey for Latin America, 1965, U.N. 1967; Anuario Estadistico del Comercio Exterior 1965, Secretaria de Industria y Comercio, Mexico City, 1966.

Table 3. Mexico: Balance of payments on current account; actual 1950, 1960, 1963, and 1965, and projections to 1970 and 1975 1/

Item	Million 1960 dollars						Percentage of total					
	Actual				Projected		Actual				Projected	
	1950	1960	1963	1965	1970	1975	1950	1960	1963	1965	1970	1975
Exports of goods & services	887	1,369	1,643	1,750	2,260	2,890	100	100	100	100	100	100
Commodity exports	529	739	900	958	1,208	1,470	60	54	55	54	53	51
Agricultural	237	374	409	393	535	608	27	27	25	22	24	21
Cotton	149	158	189	182	242	280	17	12	12	10	11	10
Coffee	48	72	47	63	91	101	5	5	3	4	4	3
Sugar	2	53	57	51	47	53	-	4	3	3	2	2
Livestock and meat	2	43	61	48	98	112	-	3	4	3	4	4
Tomatoes	10	26	24	30	28	31	1	2	1	2	1	1
Henequen & mfgs.	26	22	31	19	29	31	3	2	2	1	1	1
Other traditional exports	177	172	196	168	236	278	20	13	12	10	10	10
Copper	29	26	23	7	22	20	3	2	1	-	1	1
Lead	73	33	26	24	39	42	8	2	1	1	2	1
Zinc	27	30	29	37	45	55	3	2	2	2	2	2
Sulfur	-	28	33	29	40	48	-	2	2	2	2	2
Petroleum & derivatives	28	20	35	34	43	52	3	1	2	2	2	2
Shrimp	20	34	50	37	50	61	2	2	3	2	2	2
New products	115	194	295	397	434	588	13	14	18	24	19	20
Tourism & border transactions	250	518	631	704	950	1,300	28	38	38	44	42	44
Other items 2/	108	112	112	88	110	120	12	8	7	5	5	4
Imports of goods & services	1,074	1,648	1,834	1,992	2,606	3,409	100	100	100	100	100	100
Registered imports 3/	3/ 825	3/1,187	3/1,192	3/1,308	1,681	2,139	77	72	65	66	65	63
Consumer goods	117	135	165	128	n.a.	n.a.	11	8	9	7	n.a.	n.a.
Fuels	34	50	34	28	n.a.	n.a.	3	3	2	1	n.a.	n.a.
Raw materials	284	483	449	605	n.a.	n.a.	26	29	24	30	n.a.	n.a.
Capital goods	345	514	463	544	n.a.	n.a.	32	31	25	28	n.a.	n.a.
Border trade & tourism	148	250	365	387	480	655	9	15	20	19	18	19
Income on foreign direct investment	66	142	176	200	270	380	6	9	10	10	10	11
Other items	35	69	101	97	175	235	8	4	5	5	7	7
Balance of trade & services	-187	-279	-194	-242	-346	-519	..	..	..	..	..	..

1/ The projections are based on the assumption that GDP will increase at 6 percent per year during 1961-70 and at 7 percent during 1971-75. 2/ Includes gold and silver production (less consumption in Mexico for industrial use), remittances of migratory workers, and miscellaneous items. 3/ The sum of the components is slightly less than the total because of omission of group X in the ECLA classification, which includes various commodities not classifiable in any of the other 9 groups.

- = less than $0.5 million or 0.5 percent. n.a. = not available. .. = not applicable.

Sources: Study report, tables I-2, I-3, I-4, and I-8; Compendio Estadistico, 1952, Direccion General de Estadistica, Mexico City, 1955; Anuario Estadistico del Comerico Exterior, 1965; Comercio Exterior, Banco de Comercio Exterior, May 1966, March 1967.

Table 4.--Percentage distribution of population in Mexico by family income and expenditure brackets, 1963

Monthly family income (dollars)	Population	Income	Expenditure
	Percent		
0 - 24	15.9	3.1	6.7
25 - 48	24.1	8.6	12.5
49 - 80	21.9	13.1	15.4
81 - 120	11.2	10.6	12.0
121 - 240	16.3	24.6	23.7
241 - 360	5.6	13.0	11.7
361 - 480	2.2	7.8	5.8
Over 480	2.8	19.2	12.2
Total	100.0	100.0	100.0

Source: Study report, table A II-2.

Table 5.--Composition of monthly family expenditure in Mexico, 1963 1/

Item	Total population	Urban	Rural
	Percent		
Food, beverages and tobacco	45.6	40.5	58.4
Clothing and shoes	13.1	13.5	12.6
Housing, fuel, and lighting	14.6	16.3	10.3
Domestic services 2/	18.9	30.9	14.0
Durable consumer goods	5.3	6.1	3.2
Insurance, mortgages, and savings	2.5	2.9	1.5
Total monthly expenditure	100.0	100.0	100.0

1/ Cash expenditures and the value at market prices of commodities produced by the family for its own consumption. 2/ Includes the following items: medical expenses, personal purchases, domestic cleaning materials, education, transportation, recreation, vacations, domestic servants, and transfers to other members of the family.

Source: Study report, table II-7.

Table 6.--Income elasticity of demand for agricultural and livestock products in Mexico, 1940-60, and projections 1965-75

Year	Calculated on basis of --		
	Time series 1/		Family income and expenditure survey, 1963
	1940-60	1950-60	
1940	0.89	n.a.	n.a.
1950	.63	0.66	n.a.
1960	.53	.56	0.35
Projections:			
1965	0.50	n.a.	0.33
1970	.47	n.a.	.32
1975	.44	n.a.	.31

1/ From the same basic information, the FAO estimated for Mexico, 1962, an income elasticity of 0.58; this coefficient was used in FAO's projections to 1970 (Agricultural Commodities Projections for 1970, Commodity Review 1962, Special Supplement, Doc. E/CN.13/48, CCP 62/5, Rome, 1962). The Economic Commission for Latin America calculated an elasticity of 0.57 for the region as a whole (Problemas y perspectivas de la agricultura latinoamericana (Doc. E/CN.12/686, March 1963).

n.a. = not available.

Source: Study report, table II-3.

Table 7.--Per capita income elasticities of demand derived from the family income and expenditure survey, 1963 actual and projections for 1965, 1970, and 1975, for urban and rural populations 1/

Commodities	1963		1965		1970		1975	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Corn	-0.484	-0.294	-0.484	-0.302	-0.484	-0.311	-0.484	-0.321
Wheat	.247	.579	.247	.600	.247	.623	.247	.646
Rice	.190	.648	.189	.594	.186	.539	.184	.488
Other starches 2/	.289	.549	.288	.549	.282	.549	.276	.549
Beans	- .282	- .237	- .282	- .241	- .282	- .248	- .282	- .256
Other pulses 2/	- .027	.329	- .028	.329	- .030	.329	- .032	.329
Green peppers	- .089	- .258	- .089	- .258	- .089	- .258	- .089	- .258
Tomatoes	.411	.509	.409	.491	.397	.465	.385	.441
Other fresh vegetables	.646	.578	.636	.599	.593	.622	.548	.645
Canned vegetables 2/	1.003	1.006	1.003	1.006	1.002	1.005	1.002	1.005
Citrus fruit, bananas	.235	.753	.234	.779	.230	.785	.226	.802
Fruit 2/	.759	.754	.761	.772	.774	.789	.787	.805
Canned fruit 2/	1.177	2.357	1.177	2.160	1.177	1.962	1.177	1.777
Sugar	.178	.190	.177	.187	.175	.184	.173	.180
Honey and piloncillo 2/	.672	1.008	.661	.924	.616	.839	.570	.760
Beef	.222	.927	.221	.850	.218	.771	.214	.699
Other meats 2/	.938	1.608	.924	1.674	.860	1.338	.796	1.212
Fresh milk	.590	.964	.581	.884	.541	.802	.500	.727
Eggs	.474	1.042	.467	.955	.435	.867	.402	.785
Lard	- .177	.742	- .177	.680	- .177	.618	- .177	.559
Vegetable oils	.566	1.251	.558	1.146	.520	1.041	.481	.943
Tobacco 2/	.843	.699	.843	.699	.843	.699	.843	.699
Chocolate 2/	.887	.194	.889	.190	.896	.187	.903	.184
Coffee 2/	.303	.254	.303	.254	.303	.254	.303	.254
Beer	.515	.670	.508	.625	.473	.557	.437	.496
Clothing and textile materials 2/	.648	.596	.648	.596	.648	.596	.648	.596
Cotton textiles 2/	.537	.550	.537	.550	.537	.550	.537	.550
Woolen clothing & materials, total	- - -1.889- - -		- - -1.781- - -		- - -1.642- - -		- - -1.535- - -	
Leather footwear 2/	.440	.396	.440	.396	.440	.396	.440	.396

1/ Functions were calculated on total per capita expenditure rather than on per capita income. 2/ Money expenditure in pesos was used to express consumption of these commodities. The remaining commodities were treated in physical units.

Source: Study report, table II-10.

Table 8.--Growth of aggregate domestic demand for agricultural products in Mexico, 1940, 1950, and 1960, and projections to 1965, 1970, and 1975

Products	Value 1/						Percentage share						Average rate of growth			
	1940	1950	2/1960	1965	1970	1975	1940	1950	2/1960	1965	1970	1975	1941-50	1951-60	1961-75	Per capita 1961-75
	Million dollars						Percent						Percent			
Crop products:																
Cereals 3/	218	359	488	580	696	843	32.1	34.3	26.7	25.3	24.3	23.6	5.1	3.1	3.7	0.1
Other starches 4/	6	9	17	22	27	34	.9	.9	.9	1.0	.9	.9	4.1	6.4	4.5	.9
Pulses	24	43	79	90	107	127	3.5	4.1	4.3	3.9	3.8	3.6	6.1	6.2	3.2	- .4
Vegetables 5/	25	44	65	82	102	129	3.7	4.2	3.6	3.6	3.6	3.6	5.8	4.2	4.7	1.1
Fruit	56	85	141	181	233	298	8.3	8.1	7.7	7.9	8.1	8.3	4.1	5.3	5.1	1.5
Sugar	32	59	97	123	155	196	4.8	5.6	5.3	5.4	4.4	5.5	6.2	4.9	4.8	1.2
Oilseeds	18	47	100	126	157	196	2.6	4.5	5.4	5.5	5.5	5.5	10.3	7.8	4.6	1.0
Cocoa, coffee, & tobacco	22	25	44	56	70	89	3.2	2.4	2.4	2.4	2.4	2.5	1.3	5.9	4.8	1.2
Textile fibers	31	35	57	73	95	120	4.6	3.3	3.1	3.2	3.3	3.3	1.4	5.0	5.0	1.4
Total	432	706	1,088	1,333	1,642	2,032	63.7	67.4	59.4	58.2	56.4	56.8	5.1	4.5	4.2	.6
Livestock products:																
Meat, milk, & eggs	224	318	688	893	1,137	1,446	33.1	30.4	37.6	38.9	39.8	40.4	3.5	5.6	5.1	1.5
Animal fats	16	18	35	42	52	62	2.3	1.7	1.9	1.8	1.8	1.7	1.4	5.2	4.0	.4
Hides and skins	6	5	19	25	31	39	.9	.5	1.1	1.1	1.1	1.1	2.1	14.2	4.7	1.1
Total	246	341	742	960	1,220	1,547	36.3	32.6	40.6	41.8	42.7	43.2	3.4	5.7	5.0	1.4
Grand total	678	1,047	1,830	2,293	2,862	3,579	100.0	100.0	100.0	100.0	100.0	100.0	4.5	4.9	4.5	.9

1/ At average 1958-60 farm prices. 2/ 1959-61 average. 3/ Corn, wheat, rice, barley, oats, and sorghum. 4/ Potatoes and sweetpotatoes. 5/ Includes alfalfa.

Source: Study report, tables II-4 and II-5.

Table 9.--Domestic demand for selected agricultural commodities in Mexico, actual 1960, and projected 1965, 1970, and 1975

Commodity	Year	Direct consumption		Indirect consumption			Total
		Per capita	Aggregate	Seed 1/	Feed	Industrial	
		Kilos	1,000 metric tons				
Cereals:							
Corn	1960	121.4	4,370	116	1,149	441	6,076
	1965	112.7	4,844	129	1,466	568	7,008
	1970	107.5	5,491	157	1,883	736	8,267
	1975	101.4	6,174	187	2,552	920	9,833
Wheat	1960	33.4	1,202	84	..	..	1,286
	1965	34.9	1,499	105	..	..	1,604
	1970	36.5	1,966	130	..	..	1,995
	1975	38.3	2,335	163	..	..	2,498
Rice	1960	4.9	178	4	..	27	209
	1965	5.1	222	6	..	36	264
	1970	5.4	274	7	..	45	326
	1975	5.5	337	9	..	56	402
Oats	1960	0.8	29	5	41	..	75
	1965	.9	37	6	57	..	101
	1970	.9	46	8	62	..	116
	1975	1.0	61	10	75	..	146
Barley	1960	..	..	11	29	174	215
	1965	..	..	14	40	232	287
	1970	..	..	19	50	288	357
	1975	..	..	24	64	369	457
Sorghum	1960	..	..	3	223	..	226
	1965	..	..	4	310	..	314
	1970	..	..	5	416	..	421
	1975	..	..	6	549	..	555
Tubers:							
Potatoes	1960	6.7	241	42	..	..	283
	1965	7.1	305	52	..	..	358
	1970	7.4	377	65	..	..	442
	1975	7.7	471	81	..	..	552
Sweetpotatoes	1960	2.5	90	2	..	..	93
	1965	2.6	113	4	..	..	118
	1970	2.7	140	5	..	..	145
	1975	2.9	174	7	..	..	181
Pulses:							
Dry beans	1960	16.9	607	29	..	..	636
	1965	15.7	674	33	..	..	707
	1970	15.3	782	38	..	..	820
	1975	14.9	906	40	..	..	950
Chickpeas	1960	0.47	17	4.3	93	..	114
	1965	.49	21	6.0	133	..	160
	1970	.48	25	7.8	173	..	206
	1975	.49	30	10.3	230	..	270
Other 2/	1960	.97	35	1.2	..	..	36
	1965	1.03	44	1.4	..	..	45
	1970	1.05	54	1.7	..	..	56
	1975	1.14	69	2.1	..	..	71

Table 9.--Domestic demand for selected agricultural commodities in Mexico, actual 1960, and projected 1965, 1970, and 1975--Continued

Commodity	Year	Direct consumption		Indirect consumption			Total
		Per capita	Aggregate	Seed 1/	Feed	Industrial	
		Kilos	1,000 metric tons				
Fruits:							
Avocados	1960	2.90	104	..	..	..	104
	1965	3.07	132	..	..	..	132
	1970	3.22	164	..	..	..	164
	1975	3.43	209	..	..	..	209
Citrus fruits	1960	21.7	701	..	..	33	814
	1965	23.3	1,002	..	..	46	1,048
	1970	25.1	1,285	..	..	63	1,348
	1975	26.5	1,613	..	..	87	1,699
Strawberries	1960	0.29	10	..	..	2	12
	1965	.32	14	..	..	3	17
	1970	.34	18	..	..	4	21
	1975	.35	23	..	..	5	29
Mangoes	1960	4.40	159	..	..	2	161
	1965	4.73	203	..	..	3	206
	1970	5.10	261	..	..	4	264
	1975	5.43	331	..	..	5	336
Apples	1960	1.97	71	..	..	..	71
	1965	2.17	93	..	..	..	93
	1970	2.36	120	..	..	..	120
	1975	2.63	160	..	..	..	160
Cantaloups & watermelons	1960	4.60	166	..	..	..	166
	1965	4.95	212	..	..	..	212
	1970	5.28	270	..	..	..	270
	1975	5.68	346	..	..	..	346
Pears	1960	.55	20	..	..	..	20
	1965	.61	26	..	..	..	26
	1970	.65	33	..	..	..	33
	1975	.73	44	..	..	..	44
Pineapples	1960	2.87	103	..	..	63	166
	1965	3.08	133	..	..	87	220
	1970	3.29	169	..	..	119	288
	1975	3.54	216	..	..	169	385
Bananas 3/	1960	15.94	574	..	..	n.a.	574
	1965	16.48	708	..	..	n.a.	708
	1970	18.31	936	..	..	n.a.	936
	1975	19.67	1,198	..	..	n.a.	1,198
Grapes	1960	.80	19	..	..	40	69
	1965	.88	38	..	..	52	90
	1970	.95	49	..	..	68	116
	1975	1.06	65	..	..	90	154
Vegetables:							
Garlic	1960	.22	8	0.8	..	1.1	10
	1965	.24	10	1.1	..	1.5	13
	1970	.25	13	1.3	..	1.8	16
	1975	.28	17	1.8	..	2.4	21

Table 9.--Domestic demand for selected agricultural commodities in Mexico, actual 1960, and projected 1965, 1970, and 1975--Continued

Commodity	Year	Direct consumption		Indirect consumption			Total
		Per capita	Aggregate	Seed 1/	Feed	Industrial	
		Kilos	1,000 metric tons				
Onions	1960	1.49	54	..	..	5	59
	1965	1.63	70	..	..	6	76
	1970	1.74	89	..	..	8	97
	1975	1.93	177	..	..	11	188
Green peas	1960	.20	7	..	..	2.5	10
	1965	.22	10	..	..	3.3	13
	1970	.23	12	..	..	4.2	16
	1975	.26	16	..	..	5.5	21
Dry peppers	1960	.44	16	..	..	..	16
	1965	.48	21	..	..	..	21
	1970	.51	26	..	..	..	26
	1975	.57	35	..	..	..	35
Green peppers	1960	2.10	76	..	..	9	85
	1965	2.05	88	..	..	10	98
	1970	1.95	100	..	..	15	114
	1975	1.90	116	..	..	20	135
Tomatoes	1960	6.84	246	..	..	26	272
	1965	7.30	313	..	..	33	346
	1970	7.54	385	..	..	43	429
	1975	7.89	480	..	..	57	537
Oilseeds:							
Cottonseed	1960	19.63	707	26	..	n.a.	733
	1965	20.20	849	31	..	n.a.	880
	1970	20.63	1,054	39	..	n.a.	1,093
	1975	20.83	1,268	46	..	n.a.	1,314
Sesame	1960	3.68	132	1.3	..	n.a.	134
	1965	4.20	180	1.8	..	n.a.	182
	1970	4.50	230	2.3	..	n.a.	232
	1975	4.90	299	2.9	..	n.a.	302
Peanuts	1960	2.18	78	2.2	..	n.a.	81
	1965	2.50	107	3	..	n.a.	110
	1970	2.67	136	3.8	..	n.a.	140
	1975	2.91	177	4.9	..	n.a.	182
Safflower	1960	.98	35	1.4	..	n.a.	37
	1965	1.11	48	1.9	..	n.a.	50
	1970	1.20	61	2.5	..	n.a.	64
	1975	1.31	80	3.2	..	n.a.	83
Soybeans	1960	.33	12	.7	..	n.a.	13
	1965	.38	16	.9	..	n.a.	17
	1970	.41	21	1.1	..	n.a.	22
	1975	.45	27	1.5	..	n.a.	29
Copra	1960	5.08	n.a.	..	..	183	183
	1965	5.23	n.a.	..	..	224	224
	1970	5.34	n.a.	..	..	273	273
	1975	5.67	n.a.	..	..	345	345

Table 9.--Domestic demand for selected agricultural commodities in Mexico, actual 1960, and projected 1965, 1970, and 1975--Continued

Commodity	Year	Direct consumption: Per capita	Direct consumption: Aggregate	Indirect consumption: Seed 1/	Indirect consumption: Feed	Indirect consumption: Industrial	Total
		Kilos	1,000 metric tons				
Oil palm kernels	1960	.62	n.a.	..	..	22	22
	1965	.63	n.a.	..	..	27	27
	1970	.64	n.a.	..	..	33	33
	1975	.65	n.a.	..	..	40	40
Flaxseed	1960	.53	n.a.	1.1	..	20	20
	1965	.54	n.a.	1.3	..	25	25
	1970	.56	n.a.	1.7	..	30	30
	1975	.56	n.a.	2.1	..	37	37
Other crop products:							
Cocoa beans	1960	.54	20	..	..	..	20
	1965	.56	24	..	..	..	24
	1970	.60	31	..	..	..	31
	1975	.65	40	..	..	..	40
Coffee	1960	.94	34	..	..	..	34
	1965	.98	42	..	..	..	42
	1970	1	51	..	..	..	51
	1975	1.04	63	..	..	..	63
Sugar	1960	20	720	..	..	308	1,028
	1965	20.2	865	..	..	383	1,248
	1970	21.4	1,093	..	..	478	1,571
	1975	22.8	1,388	..	..	594	1,982
Alfalfa	1960	..	..	..	4,277	..	4,277
	1965	..	..	..	5,282	..	5,282
	1970	..	..	..	6,569	..	6,569
	1975	..	..	..	8,266	..	8,266
Tobacco	1960	2.01	72	..	..	..	72
	1965	2.20	94	..	..	..	94
	1970	2.35	120	..	..	..	120
	1975	2.53	154	..	..	..	154
Animal products:							
Beef	1960	8	262	..	..	26	288
	1965	8.8	338	..	..	38	376
	1970	9.2	424	..	..	48	472
	1975	9.7	531	..	..	63	594
Pork	1960	4.4	153	..	..	5	158
	1965	5.1	212	..	..	7	219
	1970	5.8	284	..	..	10	294
	1975	6.4	375	..	..	13	388
Goat	1960	.3	12	..	..	..	12
	1965	.4	16	..	..	..	16
	1970	.4	21	..	..	..	21
	1975	.5	28	..	..	..	28
Lamb	1960	.4	12	..	..	..	12
	1965	.4	17	..	..	..	17
	1970	.5	23	..	..	..	23
	1975	.5	30	..	..	..	30

Table 9.--Domestic demand for selected agricultural commodities in Mexico, actual 1960, and projected 1965, 1970, and 1975--Continued

Commodity	Year	Direct consumption		Indirect consumption			
		Per capita	Aggregate	Seed 1/	Feed	Industrial	Total
		Kilos	1,000 metric tons				
Poultry	1960	.5	19	..	..	..	19
	1965	.6	27	..	..	..	27
	1970	.7	36	..	..	..	36
	1975	.8	47	..	..	..	47
Lard	1960	1.39	50	..	..	..	50
	1965	1.42	61	..	..	..	61
	1970	1.46	75	..	..	..	74
	1975	1.47	90	..	..	..	90
Tallow	1960	.72	..	..	..	26	26
	1965	.74	..	..	..	32	32
	1970	.76	..	..	..	39	39
	1975	.76	..	..	..	43	43
Milk	1960	103.5	3,726	..	..	..	3,726
	1965	108.7	4,655	..	..	..	4,655
	1970	113.3	5,789	..	..	..	5,789
	1975	119.6	7,284	..	..	..	7,284
Eggs	1960	5.1	184	..	..	..	184
	1965	5.7	243	..	..	..	243
	1970	6.1	310	..	..	..	310
	1975	6.4	392	..	..	..	392
Fibers:							
Cotton	1960	3.15	..	..	..	114	114
	1965	3.45	..	..	..	148	148
	1970	3.76	..	..	..	192	192
	1975	3.99	..	..	..	243	243
Wool	1960	.31	..	..	..	11	11
	1965	.33	..	..	..	14	14
	1970	.36	..	..	..	18	18
	1975	.39	..	..	..	24	24
Henequen	1960	..	..	..	..	45	45
	1965	..	..	..	..	54	54
	1970	..	..	..	..	64	64
	1975	..	..	..	..	78	78

1/ Same ratio to total assumed as in 1959-61. 2/ Broad beans, dry peas, and lentils. 3/ Includes roatan and other varieties.

n.a. = not available. .. = not applicable.

Source: Study report, tables II-11, II-22, II-28, II-29, II-30, II-32, II-37, II-38, II-41, and II-43.

Table 10.--Per capita daily availability of nutrients, actual 1960 and projections to 1975

Commodity groups	Actual 1/		Projected to 1975 2/	
	Calories	Proteins	Calories	Proteins
	Number	Grams	Number	Grams
Cereals	1,432	33.93	1,299	31.00
Other starches	19	0.30	22	0.35
Pulses	165	10.72	146	9.72
Vegetables	39	2.01	45	2.58
Fruit	54	.84	69	1.08
Sugar	291	0	312	0
Vegetable oils	321	0	428	0
Meat	86	6.40	92	8.23
Milk and eggs	204	11.21	255	14.04
Fish and seafood	9	1.60	13	2.32
Animal fats	34		46	
Total	2,654	67.40	2,727	69.32
By origin:				
Vegetable	2,321	47.82	2,321	44.73
Animal	333	19.22	406	24.59

1/ 1959-61 average. 2/ According to domestic demand projections, table 9.

Source: Study report, table II-47.

Table 11.--Per capita daily consumption of nutrients in Mexico, by monthly family income levels, derived from family income and expenditure survey, 1963

Monthly family income (dollars)	Calories consumed			Protein consumed					
				All protein			Of animal origin		
	By urban population	By rural population 1/	Total	By urban population	By rural population 1/	Total	By urban population	By rural population 1/	Total
	Units			Grams					
0 - 24	2,407	2,561	2,543	81.4	75.9	76.5	16.5	11.3	11.9
25 - 48	2,202	2,671	2,558	75.3	81.9	80.3	19.1	16.0	16.7
49 - 80	2,253	2,612	2,487	82.4	84.6	83.8	27.0	21.6	23.5
81 - 120	2,410	2,777	2,551	93.3	95.4	94.1	36.0	33.3	35.0
121 - 240	2,398	2,744	2,534	97.5	100.7	98.8	42.8	40.5	41.9
241 - 360	2,644	2,886	2,737	110.1	108.1	109.3	52.8	46.5	50.4
361 - 480	2,513	2,912	2,592	110.4	114.3	111.2	58.4	48.7	56.7
Over 480	2,525	2,907	2,564	116.8	117.9	116.9	64.5	55.3	63.6
Average	2,377	2,667	2,551	92.3	86.3	88.7	36.8	22.4	28.1

1/ Localities with up to 10,000 inhabitants.

Source: Study report, table II-48.

Table 12.--Export and potential export demand for selected agricultural products from Mexico, percentage share of agricultural exports and percent of domestic production exported, actual 1940, 1950, 1960, and 1965, and projected demand to 1965, 1970, and 1975

Commodity	Exports							Percentage share of exports 1/							Percent of domestic production exported						
	Actual				Projected demand			Actual				Projected			Actual				Projected		
	1940	1950	1960 2/	1965	1965	1970	1975	1940	1950	1960	1965	1965	1970	1975	1940	1950	1960 2/	1965	1965	1970	1975
	1,000 metric tons							Percent							Percent						
Cotton	9	162	359	409	382	407	437	5.0	52.2	48.3	47.7	48.7	47.6	46.5	12.7	63.0	82.7	71.5	72.8	63.8	64.3
Henequen 3/	83	80	110	91	108	106	111	8.6	4.8	2.7	4.7	2.4	2.2	2.1	87.4	80.0	70.5	60.7	68.4	66.3	67.3
Coffee	23	39	83	78	91	99	108	17.0	16.3	14.2	10.2	14.6	14.3	14.3	43.4	60.9	71.6	43.3	64.1	56.9	58.1
Cocoa beans	-	2	6	9	7	7	8	-	0.6	0.7	1.2	0.9	0.9	0.9	-	25.0	25.0	40.9	22.6	17.9	16.0
Sugar	3	26	462	528	337	400	455	0.3	1.7	13.1	14.6	10.2	11.1	11.5	0.9	4.1	33.6	22.7	20.8	20.9	19.4
Beef 4/	79	18	76	68	87	100	116	49.5	6.4	11.4	11.2	13.9	14.6	15.3	n.a.	n.a.	24.6	20.3	23.8	23.0	23.2
Total	..	..	..	..	..	..	..	80.4	82.0	90.4	89.6	90.7	90.7	90.6	..	..	..	..	..	..	..
Fruits & vegetables:																					
Tomatoes	25	96	136	161	147	158	171	2.3	5.1	3.1	3.0	3.0	3.0	2.9	26.0	27.5	33.6	37.3	32.1	30.4	30.0
Other vegetables 5/	..	..	..	..	..	..	..	1.0	1.4	0.9	0.9	1.0	1.0	1.0	..	..	..	..	..	..	..
Cantaloups	-	2	40	71	43	46	50	-	0.1	0.6	0.8	0.6	0.5	0.5	-	9.1	49.4	35.5	46.7	44.2	42.0
Strawberries	-	-	15	23	15	16	18	-	0.2	0.5	1.2	0.6	0.7	0.7	-	-	65.2	82.0	57.7	53.3	52.9
Oranges	-	14	30	79	35	40	47	-	0.5	0.4	1.1	0.5	0.5	0.6	-	2.9	4.1	9.1	4.4	4.6	4.9
Watermelons	-	-	24	26	27	28	30	-	-	0.4	0.3	0.4	0.4	0.4	-	-	15.8	6.8	15.5	14.1	13.3
Pineapples	8	27	19	21	19	21	24	0.4	0.6	0.2	0.2	0.2	0.2	0.2	19.5	22.1	10.4	10.1	9.1	8.9	8.9
Bananas	4	2	1	1	1	1	1	10.5	3.1	0.3	0.2	0.3	0.3	0.3	0.8	0.5	0.1	0.1	0.1	0.1	0.1
Total	..	..	..	..	..	..	..	14.2	11.0	6.6	7.7	6.6	6.6	6.6	..	..	..	..	..	..	..
Other products 6/	..	..	..	..	..	..	..	5.4	7.0	2.6	2.7	2.7	2.7	2.7	..	..	..	..	..	..	..

1/ 1958-60 average farm prices. 2/ 1958-62 average. 3/ Fiber and manufactures. 4/ In carcass and on hoof. 5/ Includes garlic, onions, green peas, dry peppers, and green peppers. 6/ Namely chickpeas, honey, peanuts, and tobacco leaf.

- = less than 500 tons. n.a. = not available. .. = not applicable.

Sources: Study report, tables AIII-3 and AIII-4; Anuario del Comercio Exterior 1960 and 1965, Secretaria de Industria y Comercio, Mexico, 1966.

Table 13.--Value of production of agricultural products in Mexico, percentage share, and rates of growth 1940, 1950, and 1960 actual, and 1965, 1970, and 1975 projections

Products	Value						Percentage share						Annual rates of growth					
	1940	1950	1960 1/	1965	1970	1975	1940	1950	1960 1/	1965	1970	1975	1941-50	1951-60	1961-65	1966-70	1971-75	1961-75
	Million dollars 2/						Percent						Percent					
Crop production:																		
Cereals	212.4	335.8	492.1	621.8	778.0	922.5	25.1	25.7	23.5	25.4	25.1	25.3	4.7	3.9	4.8	4.5	3.5	4.3
Tubers	6.0	9.1	17.2	20.9	25.5	32.4	0.7	0.7	0.8	0.8	0.8	0.9	4.3	6.6	2.4	4.1	4.9	4.3
Pulses	25.8	43.2	77.0	90.4	110.7	137.6	3.1	3.3	3.7	3.5	3.6	3.8	5.3	6.0	3.3	4.1	4.4	4.0
Vegetables	16.4	37.4	47.4	53.6	60.7	66.7	1.9	2.9	2.3	2.2	2.0	1.8	8.6	2.4	2.5	2.5	1.9	2.3
Fruit	63.8	90.8	147.5	171.6	202.5	228.5	7.6	7.0	7.0	6.7	6.5	6.3	3.6	5.0	3.1	2.8	2.5	3.0
Sugar	30.7	61.1	132.8	156.4	184.4	226.6	3.6	4.7	6.3	6.1	5.9	6.2	7.1	8.1	2.8	3.4	4.2	3.4
Oilseeds	17.7	51.0	100.5	120.2	143.7	157.9	2.1	3.9	4.8	4.7	4.6	4.3	11.1	7.0	3.1	3.7	1.9	3.1
Coffee & cocoa	27.4	36.2	69.8	85.8	105.8	116.8	3.2	2.8	3.3	3.4	3.4	3.2	2.8	6.8	3.5	4.3	2.0	3.5
Tobacco	5.7	8.9	17.9	20.7	25.8	32.1	0.7	0.7	0.9	0.8	0.8	0.9	4.6	7.3	3.0	4.5	4.5	4.0
Textile fibers	35.6	109.2	186.8	224.2	269.9	287.4	4.2	8.4	8.9	8.8	8.7	7.9	11.9	5.5	3.7	3.8	1.1	2.9
Alfalfa	11.9	15.9	29.1	35.8	44.0	50.4	1.4	1.2	1.4	1.4	1.4	1.4	3.0	3.3	4.3	4.2	2.3	3.7
Total	453.4	798.6	1,318.1	1,601.4	1,950.0	2,258.9	53.7	61.1	62.9	62.9	62.9	62.0	5.8	5.2	4.0	4.0	3.0	3.7
Animal production:																		
Meat 3/	n.a.	n.a.	305.4	365.5	436.8	508.0	-	-	14.6	14.4	14.1	13.9	-	-	3.7	3.7	3.1	3.5
Milk (fresh)	102.5	210.9	289.3	348.3	421.6	516.2	12.1	16.2	13.8	13.7	13.6	14.2	7.5	3.2	3.8	3.9	3.4	4.0
Eggs	n.a.	n.a.	125.7	163.4	211.9	268.0	-	-	6.0	6.4	6.8	7.4	-	-	5.4	5.3	4.8	5.2
Honey	n.a.	n.a.	6.7	7.8	9.1	10.4	-	-	0.3	0.3	0.3	0.3	-	-	3.1	2.6	2.7	3.0
Animal fats	n.a.	n.a.	31.6	38.3	46.6	54.5	-	-	1.5	1.5	1.5	1.5	-	-	3.2	4.0	3.2	3.7
Hides & skins	n.a.	n.a.	15.8	18.4	21.4	24.7	-	-	0.8	0.7	0.7	0.7	-	-	3.1	3.0	2.9	3.0
Wool	n.a.	n.a.	2.9	3.2	3.5	3.8	-	-	0.1	0.1	0.1	0.1	-	-	2.0	1.5	1.7	1.8
Total	4/391.1	4/507.2	777.5	945.3	1,150.8	1,385.6	46.3	38.9	37.1	37.1	37.1	38.0	2.6	4.4	4.0	4.0	3.8	4.0
Total, all products	4/844.5	4/1,305.8	2,095.6	2,546.7	3,100.8	3,644.5	100.0	100.0	100.0	100.0	100.0	100.0	4.5	4.4	4.0	3.3	3.3	3.8

1/ 1959-61 average. 2/ At average 1958-60 prices. 3/ Beef, pork, mutton, lamb, goat, and poultry meat. 4/ Estimates based on GDP figures, Bank of Mexico.

n.a. = not available.

Source: Study report, tables III-1, III-3, III-45, and III-46.

Table 14.--Area harvested under crop groups, in Mexico: percentage share and rates of growth 1940, 1950, and 1960 actual, and projections to 1965, 1970, and 1975

Crops	Percentage share						Annual rate of growth					
	1940	1950	1960 1/	1965	1970	1975	1941-50	1951-60	1961-65	1966-70	1971-75	1961-75
Cereals	74.6	68.1	64.3	64.2	63.6	62.5	2.2	0.8	1.5	1.3	0.7	1.2
Starches	0.4	0.4	0.5	0.5	0.6	0.6	3.4	3.8	2.7	2.7	2.8	2.8
Pulses	12.6	13.3	13.4	13.8	14.3	15.1	3.7	1.4	2.2	2.2	2.2	2.2
Vegetables	0.9	1.2	1.3	1.3	1.3	1.4	5.5	2.7	1.8	1.7	1.4	1.7
Fruits	1.3	1.6	2.1	2.1	2.2	2.3	5.6	4.1	2.0	2.3	1.6	1.9
Sugar	1.3	1.8	2.7	2.8	2.9	3.1	6.5	5.6	2.0	2.5	2.5	2.2
Oilseeds except cottonseed	1.7	2.9	3.6	3.6	3.6	3.7	8.9	3.6	1.4	1.8	1.9	1.6
Cottonseed 2/	(3.5)	(6.0)	(6.6)	(6.2)	(5.9)	(5.6)	10.2	1.1	0.4	0.4	0.0	0.3
All oilseeds 2/	(5.2)	(8.9)	(10.2)	(9.8)	(9.5)	(9.4)	8.8	2.6	0.8	1.0	0.7	0.8
Coffee, cocoa, tobacco	1.9	2.1	3.4	3.4	3.4	3.6	4.1	6.5	1.5	1.5	2.0	1.8
Textile fibers	4.8	8.1	8.0	7.5	7.2	6.8	8.6	1.2	0.4	0.4	0.1	0.3
Alfalfa	0.5	0.5	0.7	0.8	0.9	0.9	2.8	5.5	3.5	3.4	2.0	3.0
Total crop production	100.0	100.0	100.0	100.0	100.0	100.0	3.1	1.4	1.6	1.4	1.1	1.4

1/ 1959-61 average. 2/ Not included in total because cottonseed area is included under textile fibers.

Source: Study report, tables III-2, III-6, III-7, III-29 and AI-9.

Table 15.--Land potential for crops, pastures, and forests in Mexico, 1940, 1950, and 1960

Year and category	Cropland		Pastures		Forests	
	Area	Proportion	Area	Proportion	Area	Proportion
	Mil. ha.	Pct.	Mil. ha.	Pct.	Mil. ha.	Pct.
Land in farms:						
1940	14.9	50.8	56.2	65.6	38.1	57.6
1950	19.9	67.9	67.4	78.6	38.8	58.6
1960	23.8	81.2	79.0	92.2	43.7	66.0
Land not in farms:						
1960	5.6	18.8	6.7	7.8	22.5	34.0
Total land, 1960	29.4	100.0	85.7	100.0	66.2	100.0

Source: Study report, table III-4.

Table 16.--Cropland in use and potential, including the extent of irrigation, in Mexico, by zones, 1960

Cropland	North	North Pacific	Gulf	South Pacific	Central	Mexico
	1,000 hectares					
Used for crops 1/	5,932	2,489	4,256	4,591	6,549	23,817
Irrigated land	1,231	1,099	32	152	1,001	3,515
With surface water	1,043	834	31	140	877	2,925
With ground water	188	265	1	12	124	590
Dry farming land	4,701	1,390	4,224	4,439	5,548	20,302
Potential cropland	1,467	427	1,245	1,464	1,022	5,625
Total	7,399	2,916	5,501	6,055	7,571	29,442

1/ Includes land idle because of rotation or for other reasons.

Source: Study report, table III-8.

Table 17.--Cropland distribution in Mexico by type and size of holding, and average size of holding, by region, 1960

Regions	Private holdings: 5 hectares or less	Private holdings: Over 5 hectares	Ejido plots 1/	Total	Private holdings: 5 hectares or less	Private holdings: Over 5 hectares	Ejido plots	Total
	-1,000-				Percent			
Number of holdings:								
North	48	137	269	454	10.6	30.1	59.3	100.0
North Pacific	12	32	76	120	10.0	26.7	63.3	100.0
Gulf	83	94	207	384	21.6	24.5	53.9	100.0
South Pacific	175	49	204	428	40.9	11.4	47.7	100.0
Central	581	135	603	1,319	44.0	10.3	45.7	100.0
Total	899	447	1,359	2,705	33.2	16.5	50.3	100.0
	-1,000 hectares-				Percent			
Area of cropland:								
North	104	3,343	2,485	5,932	1.8	56.3	41.9	100.0
North Pacific	30	1,365	1,095	2,489	1.2	54.8	44.0	100.0
Gulf	157	2,287	1,812	4,256	3.7	53.7	42.6	100.0
South Pacific	329	2,639	1,623	4,591	7.2	57.5	35.3	100.0
Central	649	2,585	3,314	6,549	9.9	39.5	50.6	100.0
Total	1,269	12,219	10,329	23,817	5.3	51.3	43.5	100.0
	Hectares							
Average size of holdings:								
North	2.2	24.4	9.2	13.1				
North Pacific	2.5	42.7	14.4	20.7				
Gulf	1.9	24.3	8.8	11.1				
South Pacific	1.9	53.8	7.9	10.7				
Central	1.1	19.1	5.4	4.9				
Average	1.4	27.3	7.6	8.8				

1/ The 1960 census records 18,699 ejidos. In this table the number of ejidatarios has been taken as representative of the number of ejido plots.

Source: Study report, table III-17.

Table 18.--Selected investments in agriculture in Mexico, selected years

Type of investment	Value of inputs 1/				Percentage of total			Annual rates of growth		
	1940	1950	1960	1962	1940	1950	1960	1941-50	1951-60	1941-60
	Million dollars				Percent			Percent		
Private investment:										
Fixed:										
Construction	130.3	107.8	135.4	n.a.	13.3	6.5	5.8	-1.9	2.3	0.2
Rail tracks & roads	5.3	4.6	5.7	n.a.	.6	.3	.2	-1.4	2.2	.4
Hydraulic works	62.0	100.5	153.9	n.a.	6.3	6.1	6.6	4.9	4.4	4.7
Total	197.6	212.9	295.0	n.a.	20.2	12.9	12.6	.8	3.3	2.0
Semifixed:										
Machinery, implements, & vehicles	64.9	205.3	345.6	n.a.	6.6	12.5	14.7	12.2	5.4	8.7
Tools & appliances	22.0	34.1	23.0	n.a.	2.2	2.1	1.0	4.5	-3.9	.2
Total	86.9	247.4	368.6	n.a.	8.8	14.6	15.7	11.0	4.1	7.5
Livestock, poultry, & beehives	697.0	1,193.8	1,685.7	n.a.	71.0	72.5	71.7	5.5	3.5	4.5
Total private	981.5	1,646.1	2,349.3	n.a.	100.0	100.0	100.0	5.3	3.6	4.5
Cumulative public investment	129.2	352.1	639.0	785.2	..	..	..	10.5	6.1	8.3

1/ Calculated at 1960 prices by means of deflator for gross fixed investment that was constructed by Ministry of Finance, Bank of Mexico Working Group.

.. = not applicable. n.a. = not available.

Source: Study report, tables III-18 and III-19.

Table 19.--Total private investment 1/ in agriculture per hectare and per person employed in 1960 dollars and number of tractors per 100 hectares, 1950 and 1960

Zones	Investment per hectare			Capital per person employed			Number of tractors per 1,000 hectares		
	1950	1960	Increase	1950	1960	Increase	1950	1960	Increase
	--Dollars--		Percent	--Dollars--		Percent	--Numbers--		Percent
North	71.58	95.12	32.9	198.64	211.21	6.3	4.6	9.3	102
North Pacific	87.03	102.88	18.2	256.95	302.64	18.0	5.2	8.8	69
Gulf	38.11	31.14	-18.9	57.73	60.85	5.4	1.2	2.7	125
South Pacific	17.93	22.34	24.6	28.66	32.43	13.1	.4	1.0	150
Central	32.67	41.71	27.7	56.93	75.10	31.9	1.3	2.9	123
Total 2/	47.56	56.61	19.0	93.76	109.05	16.3	2.6	5.1	96

1/ Includes investment in farm construction, rail tracks and roads, irrigation works, machinery, implements and tools, and livestock. 2/ Weighted average.

Source: Study report, tables III-21 and III-22.

Table 20.--Production, imports, and apparent consumption of fertilizers and insecticides in Mexico, selected years 1960-64, and projections to 1970

Production, imports, and consumption	1950	1955	1960	1963	1964 1/	Projected 1970
			1,000 tons			
Fertilizers:						
Nitrogen (N)						
Production	0.9	14.8	17.4	122.2	99.7	445.0
Imports	7.9	36.0	120.8	106.4	140.3	-
Consumption	8.8	50.8	138.2	228.6	240.0	445.0
Phosphate (P_2O_5)						
Production	3.5	14.8	17.9	54.8	63.6	167.0
Imports	0.1	7.5	28.6	7.4	4.4	-
Consumption	3.6	22.1	46.5	62.2	68.0	167.0
Potash (K_2O)						
Production	-	-	-	-	-	-
Imports	-	5.6	12.0	17.4	24.4	53.0
Consumption	-	5.6	12.0	17.4	24.4	53.0
Total consumption	12.4	78.5	196.7	308.2	332.4	665.0
Insecticides 2/						
Production	2.5	70.3	110.7	118.9	118.0	n.a.
Imports	11.6	27.5	2.9	2.8	3.0	n.a.
Consumption	14.1	97.8	113.6	121.7	121.0	n.a.

1/ Report of the U.N. International Seminar on the Production of Fertilizers, Kiev, U.S.S.R., Aug. 24-Sept. 11, 1965. 2/ In the form of mixes ready for application. Domestic production includes mostly imported ingredients. n.a. = not available. - = nil or negligible. Source: Study report, tables III-23 and III-24.

Table 21.--Index of farm prices in Mexico, 1940, 1950-1960, and average growth rates for selected periods (1958-60 = 100)

Year and period	Commodities for domestic market	Export commodities	All commodities
	Price index		
1940	15.5	14.8	15.4
1950	55.1	84.7	61.9
1951	61.5	77.1	65.3
1952	64.0	77.7	67.4
1953	66.1	84.6	70.6
1954	69.9	101.5	77.6
1955	74.4	103.0	82.0
1956	85.0	104.4	89.9
1957	89.3	111.8	98.7
1958	97.9	101.5	98.9
1959	99.8	94.7	99.6
1960	103.0	96.4	102.0
	Rates of growth		
1941-50	13.5	19.0	14.9
1951-60	6.5	1.3	5.1
1951-57	7.2	4.1	6.9
1958-60	4.8	-4.8	1.1

Source: Study report, tables III-25 and AI-3.

Table 22.--Harvested area, yield, and total output of crop products in Mexico, for selected years; actual 1940-65, and projections to 1965, 1970, and 1975

Products	Area harvested							Yield per hectare							Total output						
	Actual				Projected			Actual				Projected			Actual				Projected		
	1940	1950	1960 1/	1965 2/	1965	1970	1975	1940	1950	1960 1/	1965 2/	1965	1970	1975	1940	1950	1960 1/	1965 2/	1965	1970	1975
	1,000 hectares							Kilograms							1,000 tons						
Cereals:																					
Rice	53	106	139	147	153	176	208	1,363	1,143	1,461	2,258	1,727	2,041	2,366	73	121	203	332	265	359	492
Oats	29	80	92	88	103	123	135	695	700	828	886	870	915	990	20	56	72	81	90	112	134
Barley	140	225	237	213	282	335	370	684	719	743	812	818	894	1,046	95	162	178	173	231	300	387
Corn	5,121	6,293	6,479	7,751	6,911	7,228	7,411	568	750	956	1,144	1,082	1,223	1,380	2,911	4,720	6,194	8,865	7,477	8,840	10,227
Sorghum	-	-	113	370	135	160	177	-	-	1,996	1,792	2,182	2,386	2,793	-	-	226	663	293	382	493
Wheat	582	617	871	847	957	1,083	1,127	760	907	1,476	2,465	1,975	2,521	2,922	442	560	1,286	2,088	1,890	2,730	3,293
Total	5,926	7,323	7,927	9,416	8,541	9,104	9,428	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tubers:																					
Sweetpotatoes	11	12	15	18	17	19	22	5,374	5,638	6,105	6,944	6,385	6,676	7,016	57	67	93	125	110	130	152
Potatoes	19	30	46	52	53	61	70	4,079	4,516	6,160	8,470	6,571	7,009	7,853	78	134	283	442	346	424	550
Total	30	42	61	70	70	80	92	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pulses:																					
Beans	859	1,262	1,451	2,200	1,618	1,804	2,011	209	256	421	430	447	498	563	179	323	611	945	723	898	1,132
Chickpeas	96	123	150	113	163	179	195	670	715	811	929	831	851	881	65	88	121	105	136	152	172
Broad beans	33	39	38	40	42	45	50	540	512	717	825	739	762	785	18	20	27	33	31	35	39
Others 3/	8	11	12	13	14	15	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	997	1,434	1,651	2,366	1,837	2,043	2,273	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vegetables:																					
Garlic	3	7	5	6	6	6	7	2,355	1,933	2,638	2,833	2,745	2,857	2,885	6	14	14	17	16	19	20
Onions	6	10	15	8/16	17	18	20	3,032	4,116	4,110	7,437	4,277	4,451	4,495	17	40	63	124	72	81	89
Green peas	5	11	10	11	11	11	12	1,167	1,288	1,288	1,273	1,340	1,395	1,409	7	13	12	14	14	16	18
Dry peppers	18	19	24	25	26	28	30	702	785	717	834	746	776	784	13	15	17	21	19	22	24
Green peppers	14	16	33	8/40	36	40	43	1,979	2,378	2,753	3,058	2,865	2,980	3,010	27	38	92	116	104	118	129
Tomatoes	22	54	63	62	69	77	81	4,299	6,425	6,448	7,531	6,611	6,777	7,052	96	349	405	490	458	519	570
Others 4/	6	6	12	13	13	14	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	73	124	162	173	178	194	209	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fruits:																					
Avocados	5	8	9	10	10	11	11	10,802	7,334	12,160	13,100	12,780	13,431	14,327	52	61	104	132	122	143	165
Strawberries	-	-	5	5	5	6	6	3,262	3,139	4,662	7,800	4,875	5,099	5,332	1	2	23	39	26	30	34
Limes	5	10	14	8/16	15	16	18	6,191	6,605	7,052	9,125	7,491	7,951	8,356	34	69	98	123	113	130	148
Mangoes	4	9	8	9/ 9	9	10	11	18,673	10,629	19,378	21,978	20,366	21,404	22,831	82	99	161	192	189	221	255
Apples	2	5	7	9/10	7	8	8	19,983	9,069	10,305	11,530	11,322	12,439	13,138	39	48	69	124	81	98	106
Cantaloups	4	5	16	22	17	19	20	3,965	4,654	5,141	6,500	5,376	5,623	5,880	16	22	81	200	92	104	119
Oranges	17	51	70	75	74	79	85	11,907	9,654	10,583	11,533	10,797	10,914	11,180	207	489	738	865	798	865	950
Pears	-	1	2	9/ 3	2	2	3	13,551	9,778	10,500	11,176	11,312	12,200	13,100	10	15	20	28	24	29	35
Pineapple	2	5	8	9	9	9	10	17,805	25,939	23,025	24,000	24,079	25,182	26,336	41	122	183	207	208	237	269
Bananas	36	39	53	63	60	66	72	13,061	10,381	11,219	11,667	11,778	12,381	13,210	472	412	597	779	699	819	947
Watermelons	5	6	21	28	23	25	27	6,213	5,526	7,293	8,500	7,627	7,976	8,342	31	35	152	380	174	198	225
Grapes	2	7	11	14	16	25	26	7,307	5,769	5,932	6,286	6,112	6,297	6,487	14	41	67	88	98	156	170
Others 5/	15	23	34	38	38	42	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	100	172	257	302	284	318	343	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Table 22.--Harvested area, yield, and total output of crop products in Mexico, for selected years; actual 1940-65, and projections to 1965, 1970, and 1975--Continued

Products	Area harvested							Yield per hectare							Total output						
	Actual				Projected			Actual				Projected			Actual				Projected		
	1940	1950	1960 1/	1965 2/	1965	1970	1975	1940	1950	1960 1/	1965 2/	1965	1970	1975	1940	1950	1960 1/	1965 2/	1965	1970	1975
	1,000 hectares							Kilograms							1,000 tons						
Oilseeds:																					
Cottonseed	-	-	-	-	-	-	-	440	581	896	1,284	1,064	1,263	1,347	122	425	730	1,144	884	1,074	1,145
Sesame	77	163	208	192	223	239	263	515	485	642	651	723	814	814	40	79	134	125	161	195	214
Peanuts (in shell)	20	48	74	76	79	85	94	999	1,179	1,230	1,263	1,286	1,345	1,400	20	57	91	96	102	114	131
Safflower	-	-	29	65	31	33	37	-	-	1,254	1,308	1,412	1,590	1,843	-	-	37	85	44	53	68
Copra 6/	14	26	73	70	78	84	92	1,612	1,620	2,507	2,257	2,705	3,103	3,103	22	42	183	158	219	261	286
Oil palm kernels	-	15	20	22	21	23	25	-	689	1,130	1,088	1,272	1,432	1,432	-	11	22	25	27	32	35
Flaxseed	15	55	23	24	25	27	30	329	987	859	833	921	988	1,060	5	54	20	20	23	27	31
Soybeans	-	-	7	25	7	8	9	-	-	1,767	2,400	1,767	1,767	1,767	-	-	12	60	13	14	16
Others 7/	7	7	13	15	14	15	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	134	315	448	489	480	515	566	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cacao, coffee, tobacco:																					
Cocoa beans	8	29	67	68	82	100	121	179	275	358	324	376	395	413	1	8	24	22	31	39	50
Coffee	121	159	299	325	314	330	352	440	405	388	523	452	526	529	53	64	116	180	142	174	186
Tobacco	20	35	53	52	56	64	73	1,073	993	1,324	1,320	1,447	1,582	1,730	22	35	70	68	82	101	126
Total	149	223	419	445	452	494	546	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Textiles:																					
Cotton	277	731	815	792	831	850	850	250	344	532	722	632	750	800	71	252	434	572	525	638	680
Henequen	105	140	170	185	173	175	180	899	715	917	945	917	917	917	95	100	156	150	158	160	165
Total	383	871	985	977	1,004	1,025	1,030	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sugar	103	194	336	385	371	410	464	3,092	3,263	4,091	6,023	4,364	4,661	5,063	318	634	1,377	2,319	1,621	1,912	2,349
Alfalfa	41	54	92	106	109	129	143	42,336	43,488	46,746	52,500	48,405	50,121	52,000	1,754	2,331	4,278	5,576	5,261	6,470	7,411
Grand total	7,936	10,752	12,339	14,726	13,327	14,313	15,093	..	..	..	..	..	..	..	..	..	..	..	..	..	..

1/ 1959-61 average. 2/ Indices of agricultural production for the 20 Latin American Countries, USDA, ERS-Foreign 44, 1966; and Revista de Estadistica, Direccion General de Estadistica, Mexico City, 1966. 3/ Dry peas and lentils. 4/ Eggplant, green beans, and green tomatoes. 5/ Capulins, plums, apricots, dates, peaches, guavas, granadas, figs, jicama, limes, mamey, quince, walnuts, other nuts, papayas, tamarinds, tejocotes, and grapefruit. 6/ Includes coconuts. 7/ Olives and castor beans. 8/ 1964. 9/ 1963.

- = nil or negligible. .. = not applicable.

Sources: Study report, tables III-29, III-30, AI-9, and AI-11; for 1965 actual, Indices of Agricultural Production for the 20 Latin American Countries, 1966, USDA, ERS-Foreign 44, 1967; and attaché reports.

Table 23.--Production of animal products in Mexico, actual 1960 and 1965, and projections to 1965, 1970, and 1975

Products	Production					Value				
	Actual		Projected			Actual		Projected		
	1960 1/	1965	1965	1970	1975	1960 1/	1965	1965	1970	1975
	1,000 metric tons					Million dollars 2/				
Meat, milk, and eggs: 3/										
Poultry	19.2	n.a.	26.4	36.3	47.5	14.1	n.a.	19.5	26.7	35.0
Goat meat	11.7	13.0	11.8	11.9	12.0	6.3	n.a.	6.4	6.5	6.5
Pork 4/	157.8	216.0	194.6	234.6	274.7	100.0	136.8	123.2	148.6	174.0
Mutton and lamb	12.4	14.7	17.5	25.2	32.7	7.1	n.a.	10.1	14.5	18.9
Beef 5/	309.3	374.4	365.8	433.6	499.5	155.8	188.6	184.2	218.3	251.5
Beef cattle on hoof	44.0	n.a.	44.0	44.0	44.0	22.1	n.a.	22.1	22.1	22.1
Eggs	183.6	300.0	238.8	309.6	391.5	125.7	205.4	163.4	211.9	268.0
Fresh milk	3,724.6	4,331.0	4,489.0	5,247.5	6,645.3	289.3	336.4	348.7	421.6	516.2
Total	..	..	..	..	..	720.4	n.a.	877.6	1,070.3	1,292.2
Animal fats:										
Lard	45.7	61.0	55.5	67.9	79.5	27.3	36.4	33.3	40.6	47.6
Tallow	23.4	30.0	27.6	32.7	37.8	4.3	5.5	5.0	6.0	6.9
Total	..	..	..	..	..	31.6	41.9	38.3	46.6	54.5
Wool, clean	4.4	5.9	4.8	5.2	5.7	2.9	3.9	3.2	3.5	3.8
Beef-cattle hides	56.7	n.a.	65.8	76.3	88.4	15.6	n.a.	18.4	21.4	24.8
Honey	23.8	n.a.	27.6	32.2	36.8	6.7	n.a.	7.8	9.1	10.4
Grand total	..	..	..	..	..	777.5	n.a.	945.3	1,150.8	1,385.6

1/ 1959-61 average. 2/ At 1958-60 farm prices. 3/ Excludes consumption on farms. 4/ Excludes lard. 5/ Includes probable exports. Excludes tallow.

.. = not applicable.

Sources: Study report, table III-45; Indices of Agricultural Production for the 20 Latin American Countries, 1966, USDA, ERS-Foreign 44, 1967; and attaché reports.

Table 24.--Value of agricultural production, demand and balance, in Mexico, actual 1966, and projections to 1965, 1970, and 1975

Category	Production 1/				Rates of growth			
	1960 2/	1965	1970	1975	1961-75	1961-65	1961-70	1971-75
	Million dollars				Percent			
Production:								
Crop.	1,318	1,602	1,951	2,259	3.7	4.0	4.0	3.0
Animal.	778	945	1,151	1,386	3.9	4.0	4.0	3.8
Total.	2,096	2,547	3,102	3,645	3.8	4.0	4.0	3.3
Domestic demand:								
Crop.	1,080	1,322	1,625	2,010	3.8	3.3	3.7	4.0
Animal.	752	972	1,235	1,567	5.0	5.3	5.1	4.9
Total.	2,089	2,562	3,150	3,893	4.2	4.2	4.1	4.3
Foreign demand:								
Crop.	258	268	290	316	1.3	.8	1.2	1.7
Animal 3/	37	50	57	65	3.7	5.9	4.3	2.3
Total.	295	318	347	381	1.8	1.5	1.7	1.9
Domestic surplus or deficit:								
Crop.	+238	+280	+326	+249	..	..	..	..
Animal.	+ 27	- 27	- 84	-181	..	..	..	..
Total.	+265	+253	+242	+ 68	..	..	..	..
	Percent							
Total surplus or deficit:								
Crop.	- 20	+ 12	+ 36	- 67	..	..	..	..
Animal.	- 10	- 77	-141	-246	..	..	..	..
Grand total. .	- 30	- 65	-105	-313	..	..	..	..

1/ Values at 1958-60 average farm prices. 2/ 1959-61 average. 3/ Includes $5.6 million, $6.1 million, and $6.5 million in 1965, 1970, and 1975, respectively, corresponding to exports of animal products not individually projected.

.. = not applicable.

Source: Study report, table 1.

Table 25.--Balance of output and demand for agricultural products in Mexico, 1965, 1970, and 1975

Products	Output			Domestic demand			Surplus or deficit 1/		
	1965	1970	1975	1965	1970	1975	1965	1970	1975
	Metric tons								
Cereals:									
Rice	264,500	358,910	491,785	264,003	326,441	401,885	+497	+32,469	+89,900
Oats	89,803	112,173	134,002	100,987	116,476	146,140	-11,184	- 4,303	-12,138
Barley	230,852	299,650	387,095	286,699	356,582	456,688	-55,847	-56,932	-69,593
Corn	7,477,877	8,839,827	10,226,978	7,007,771	8,266,905	9,832,602	+470,106	+572,922	+394,376
Sorghum	293,795	381,555	493,135	314,363	420,950	555,332	-20,568	-39,395	-62,197
Wheat	1,890,308	2,730,016	3,292,732	1,603,832	1,995,427	2,498,386	+286,476	+734,589	+794,346
Tubers:									
Sweetpotatoes	109,867	129,975	151,553	117,648	145,085	181,457	- 7,781	-15,110	-29,904
Potatoes	346,101	423,806	549,710	357,521	441,896	552,288	-11,420	-18,090	- 2,578
Pulses:									
Beans	723,217	898,381	1,132,393	706,928	820,444	949,910	+16,289	+77,937	+182,483
Chickpeas	135,838	152,085	172,132	156,106	206,388	269,750	-20,268	-54,303	-97,618
Broad beans	30,675	34,589	38,957	32,794	39,847	48,104	- 2,119	- 5,258	- 9,147
Vegetables:									
Garlic	16,390	18,561	20,391	12,878	15,837	21,312	+ 3,512	+ 2,724	-921
Onions	71,605	81,070	89,073	76,220	97,063	128,481	- 4,615	-15,993	-39,408
Green peas	14,081	15,948	17,525	12,859	15,837	21,312	+ 1,222	+111	- 3,787
Dry peppers	19,103	21,620	23,764	20,623	26,054	34,708	- 1,520	- 4,434	-10,944
Green pepppers	104,051	117,749	129,394	97,990	114,433	135,179	+ 6,061	+ 3,316	- 5,785
Tomatoes	458,208	518,644	570,020	345,911	428,613	537,034	+112,297	+90,031	+32,986
Alfalfa	5,260,752	6,469,518	7,410,780	5,282,117	6,569,174	8,266,048	-21,365	-99,656	-855,268
Fruits:									
Avocados	121,666	142,570	164,646	131,903	164,340	208,059	-10,237	-21,770	-43,143
Strawberries	26,408	30,048	34,183	16,527	21,328	28,644	+ 9,881	+ 8,720	+ 5,539
Limes	112,912	129,744	148,336	154,209	181,492	206,571	-41,297	-51,748	-58,235
Mangoes	188,508	220,889	255,068	206,003	264,110	335,644	-17,495	-43,221	-80,576
Apples	81,224	96,128	105,656	93,234	120,389	159,926	-12,010	-24,261	-54,270
Cantaloups	91,628	104,267	118,623	50,698	63,775	82,127	+40,930	+40,492	+36,496
Oranges	798,730	864,830	950,378	894,058	1,166,562	1,492,714	-95,328	-301,732	-542,336
Pears	24,049	29,180	35,370	26,209	33,402	44,372	- 2,160	- 4,222	- 9,002
Pineapples	207,994	236,660	269,259	219,723	287,650	384,143	-11,729	-50,990	-114,884
Bananas, misc.	331,463	388,375	448,511	373,534	461,347	590,333	-42,071	-72,972	-141,822
Bananas, roatan	368,245	431,520	498,319	334,697	474,607	607,962	+33,548	-43,087	-109,643
Watermelons	173,850	197,797	225,067	161,548	206,203	263,819	+12,302	- 8,406	-38,752
Grapes	97,615	155,517	170,063	89,711	116,230	154,331	+ 7,904	+39,287	+15,732
Oilseeds:									
Cottonseed	884,403	1,073,628	1,145,203	896,015	1,092,223	1,314,652	-11,612	-18,595	-169,449
Sesame	161,487	194,905	214,142	181,800	232,442	301,414	-20,313	-37,537	-87,272
Peanuts	102,093	114,466	130,907	109,943	139,976	182,066	- 7,850	-25,510	-51,159
Safflower	44,304	53,483	68,111	49,618	63,857	82,813	- 5,314	-10,374	-14,702
Copra	218,974	260,612	286,332	223,848	272,800	345,256	- 4,874	-12,188	-58,924
Oil palm kernels	26,765	32,303	35,491	27,068	32,874	39,870	-303	-571	- 4,379
Flaxseed	23,124	26,593	31,347	24,630	30,141	36,535	- 1,506	- 3,548	- 5,188
Soybeans	13,244	14,198	15,599	17,216	21,967	28,619	- 3,972	- 7,769	-13,020
Cacao, coffee & tobacco:									
Cocoa beans	30,774	39,331	49,792	24,060	30,652	39,580	+ 6,714	+ 8,679	+10,212
Coffee beans	142,010	173,687	186,329	42,106	51,086	63,327	+99,904	+122,601	+123,002
Tobacco leaf	81,524	101,355	126,011	94,093	120,052	154,056	-12,569	-18,697	-28,045

Table 25.--Balance of output and demand for agricultural products in Mexico, 1965, 1970, and 1975--Continued

Producta	Output			Domestic demand			Surplus or deficit 1/		
	1965	1970	1975	1965	1970	1975	1965	1970	1970
	Metric tons								
Fibers:									
Cotton	525,322	637,500	680,000	147,797	192,006	242,704	+377,525	+445,494	+437,296
Henequen	158,370	160,475	165,060	53,706	64,127	77,991	+104,664	+96,348	+87,069
Sugar	1,621,047	1,911,546	2,349,252	1,247,445	1,569,879	1,983,243	+373,602	+341,667	+366,009
Meat, milk and eggs:									
Poultry	26,405	36,271	47,496	26,638	36,271	47,496	-233	0	0
Goat meat	11,818	11,907	12,002	15,897	21,456	38,010	- 4,079	- 9,549	-16,008
Pork 2/	194,560	234,635	274,717	219,122	294,256	387,880	-24,562	-59,621	-113,163
Mutton and lamb	17,522	25,165	32,717	16,875	33,989	29,837	+647	+ 2,176	+ 2,880
Beef 3/	365,768	433,554	499,469	375,944	471,526	594,303	-10,176	-37,972	-94,834
Beef cattle on the hoof	43,970	43,970	43,970	0	0	0	0	0	0
Eggs	238,752	39,582	391,534	242,752	309,582	391,534	- 4,000	0	0
Fresh milk	4,489,000	5,427,485	6,645,312	4,654,828	5,789,088	7,284,474	-165,828	-361,603	-639,162
Animal fats:									
Lard	55,544	67,874	79,470	61,010	74,484	89,632	- 5,466	- 6,610	-10,162
Tallow	27,612	32,737	37,803	31,794	38,826	46,278	- 4,182	- 6,089	- 8,475
Textile fibers:									
Wool, clean	4,792	5,239	5,728	14,178	18,391	23,748	- 9,386	-13,152	-18,020
Beef cattle hides	65,775	76,250	88,839	87,649	109,324	138,224	-21,874	-33,074	-49,826
Honey	27,629	32,151	36,767	9,882	12,261	15,832	+17,747	+19,890	+20,935

1/ Surplus (+) or deficit (-) generally indicates trade potential. However, external demand potential was estimated in the study only for tomatoes, strawberries, cantaloups, oranges, pineapples, bananas, cacao, coffee, cotton, henequen, sugar, beef, and cattle on hoof, with no export market expected for other surplus commodities. Export demand was projected to exceed the surplus for tomatoes, strawberries, cantaloups, oranges, pineapples, bananas, henequen, sugar, beef, and cattle, and to be less than surplus for cacao, coffee, and cotton (table 12). No attempt was made to project imports. 2/ Lard deducted. 3/ Tallow deducted.

Source: Study report, tables 4 and 5.

Table 26.--U.S. trade with Mexico

Periods and years	U.S. Exports: All commodities: Total U.S.	U.S. Exports: All commodities: To Mexico	U.S. Exports: All commodities: Mexico's share	U.S. Exports: Agricultural commodities: Total U.S.	U.S. Exports: Agricultural commodities: To Mexico	U.S. Exports: Agricultural commodities: Mexico's share	U.S. Imports: All commodities: Total U.S.	U.S. Imports: All commodities: From Mexico	U.S. Imports: All commodities: Mexico's share	U.S. Imports: Agricultural commodities: Total U.S.	U.S. Imports: Agricultural commodities: From Mexico	U.S. Imports: Agricultural commodities: Mexico's share
	Million dollars		Percent	Million dollars		Percent	Million dollars		Percent	Million dollars		Percent
5-year averages:												
1945-49	11,744	476	4.0	3,280	56	1.7	5,655	234	4.1	2,562	98	3.8
1950-54	14,138	623	4.4	3,249	81	2.5	10,265	342	3.3	4,363	139	3.2
1955-59	18,020	808	4.5	3,937	78	2.0	12,902	423	3.3	3,971	181	4.6
1960-64	22,239	822	3.7	5,364	68	1.3	16,174	530	3.3	3,895	260	6.7
1955	15,413	697	4.5	3,199	49	1.5	11,337	393	3.5	3,971	162	4.1
1956	18,940	836	4.4	4,170	69	1.7	12,516	395	3.1	3,950	139	3.5
1957	20,671	897	4.3	4,506	104	2.3	12,921	445	3.4	3,952	183	4.6
1958	17,693	882	4.9	3,855	106	2.7	12,750	455	3.6	3,881	222	5.7
1959	17,383	726	4.2	3,955	67	1.7	14,987	429	2.9	4,099	201	4.9
1960	20,299	802	4.0	4,832	56	1.2	14,652	445	3.0	3,824	223	5.8
1961	20,629	761	3.7	5,024	60	1.2	14,357	510	3.6	3,691	268	7.3
1962	21,359	739	3.5	5,034	63	1.3	16,249	539	3.3	3,868	271	7.0
1963	22,922	781	3.4	5,584	84	1.5	17,014	549	3.2	4,011	252	6.3
1964	25,987	1,026	3.9	6,348	75	1.2	18,600	607	3.7	4,082	292	7.2
1965	27,003	1,056	3.9	6,229	87	1.4	21,282	627	2.9	4,088	276	6.8
	Percent						Percent					
Annual rate of growth:												
1945/49-1950/54	3.8	5.6	..	-0.2	7.8	..	12.7	7.9	..	11.2	7.2	..
1950/54-1955/59	5.2	5.3	..	3.9	-0.8	..	4.7	4.3	..	-1.8	5.5	..
1955/59-1960/64	4.3	2.1	..	6.4	-2.8	..	4.6	4.6	..	-0.4	7.5	..

.. = Not applicable.

Sources: U.S. Foreign Agricultural Trade by commodities, August 1965, July 1966 and Foreign Agricultural Trade of the United States, ERS/USDA, November 1965, March-April 1965, August 1966.

Table 27.--Foreign trade of Mexico

Country or group	1949-51	1954-56	1959-61	1962	1963	1964	1965	1949-51	1954-56	1959-61	1962	1963	1964	1965
	Imports from principal countries													
	Million dollars							Percent						
United States	474.2	705.5	796.2	782.6	850.3	1,023.3	1,025.7	83.7	79.2	70.5	68.5	68.6	68.6	65.7
West Germany	8.3	32.4	73.3	92.8	82.2	96.5	122.2	1.5	3.6	6.5	8.1	6.6	6.5	7.8
Canada	12.1	26.4	30.7	36.5	42.5	60.9	37.8	2.1	3.0	2.7	3.2	3.4	4.1	2.4
United Kingdom	12.4	19.7	49.4	43.3	43.6	50.0	53.6	2.2	2.2	4.4	3.8	3.5	3.4	3.4
France	8.0	10.5	21.3	32.4	33.2	37.9	48.5	1.4	1.2	1.9	2.8	2.7	2.5	3.1
Italy	3.5	19.3	23.5	25.7	29.4	32.8	44.0	0.6	2.2	2.1	2.2	2.4	2.2	2.8
Japan	3.1	4.9	16.4	19.7	25.8	28.1	39.2	0.2	0.6	1.5	1.7	2.1	1.9	2.5
Switzerland	6.1	11.2	18.7	21.7	27.3	27.3	30.2	1.1	1.3	1.7	1.9	2.2	1.8	1.9
Sweden	7.7	10.6	15.2	15.5	16.0	16.1	22.6	1.4	1.2	1.3	1.4	1.3	1.1	1.4
Netherlands	2.2	7.0	11.0	14.3	13.6	15.5	18.5	0.4	0.8	1.0	1.3	1.1	1.0	1.2
Auatralia	4.2	9.2	8.9	10.4	10.7	20.7	20.6	0.7	1.0	0.8	0.9	0.9	1.4	1.3
Belgium	5.3	6.2	8.1	9.5	7.6	18.4	11.9	0.9	0.7	0.7	0.8	0.6	1.2	0.8
Spain	3.8	4.2	3.9	5.1	6.8	8.9	10.6	0.7	0.5	0.3	0.4	0.5	0.6	0.7
LAFTA 1/	2.0	2.3	4.2	6.3	11.4	19.0	30.0	0.4	0.3	0.4	0.6	0.9	1.3	1.9
Other	15.5	21.1	49.7	27.2	39.6	37.5	45.5	2.8	2.4	4.3	2.4	3.2	2.4	2.9
Total 2/	566.6	890.5	1,130.5	1,143.0	1,239.7	1,492.9	1,560.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Exports to principal countries													
United States	279.7	424.3	465.7	553.4	597.5	609.5	626.4	77.7	73.1	72.7	71.5	71.6	67.4	62.6
Japan	2.2	34.0	49.8	68.4	68.5	76.8	81.3	0.6	5.9	7.8	8.8	8.2	8.5	8.1
West Germany	5.5	22.4	16.4	11.0	18.9	17.5	20.5	1.5	3.9	2.6	1.4	2.3	1.9	2.0
Switzerland	0.8	2.2	3.1	6.2	10.4	34.3	26.8	0.2	0.4	0.5	0.8	1.2	3.8	2.7
United Kingdom	8.0	29.2	12.5	7.8	9.5	9.2	7.5	2.2	5.0	2.0	1.0	1.1	1.0	0.7
Italy	1.6	1.4	4.3	10.5	14.6	4.0	10.1	0.4	0.2	0.7	1.4	1.7	0.4	1.0
Netherlands	3.4	13.5	12.4	8.6	8.3	5.0	6.7	0.9	2.3	1.9	1.1	1.0	0.6	0.7
France	8.7	3.8	5.4	10.6	9.8	12.2	13.6	2.4	0.7	0.8	1.4	1.2	1.3	1.4
Canada	2.8	6.6	7.4	7.8	8.3	9.2	9.2	0.8	1.1	1.2	1.0	1.0	1.0	0.9
Spain	1.3	1.4	6.2	3.9	2.4	7.4	2.2	0.4	0.2	1.0	0.5	0.3	0.8	0.2
Belgium	5.2	5.9	7.6	5.5	3.4	3.0	3.5	1.4	1.0	1.2	0.7	0.4	0.3	0.3
Panama	0.6	0.9	6.6	6.6	8.5	5.0	9.0	0.2	0.2	1.0	0.9	1.0	0.6	0.9
LAFTA 1/	7.1	8.3	9.8	21.2	31.8	45.8	44.1	2.0	1.4	1.5	2.7	3.8	5.1	4.4
CACM 3/	5.7	8.9	7.6	9.4	11.1	12.2	15.2	1.6	1.5	1.2	1.2	1.3	1.3	1.5
Other	27.2	17.7	25.5	42.5	31.6	53.3	124.0	9.7	4.2	5.5	7.7	5.3	8.7	19.8
Total 2/	360.0	580.5	640.3	773.4	834.6	904.4	1,000.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Revaluation 4/		142.5	114.3	126.1	101.3	118.0	111.5							
Total		723.0	754.6	899.5	935.9	1,022.4	1,111.6							

1/ Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela. 2/ Percentage totals do not add up to 100.0 due to rounding. 3/ Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. 4/ Bank of Mexico's revaluation of custom declared values on the basis of world price quotations.

Source: Anuario Estadistico del Comercio Exterior, 1953-65, Secretaria de Industria y Comercio, Mexico City.

Table 28.--U.S. agricultural imports from Mexico, 1955-65 value, and percentage share of total agricultural imports

Periods and years	Coffee	Cocoa beans	Bananas	Fruits, nuts and vegetables	Spices 1/	Cane sugar	Cattle & meat 2/	Fats & oils 3/	Unmanufactured tobacco	Hides & skins 4/	Other	Total
	1,000 dollars											
5-year average:												
1955-59	78,915	3,072	1,652	24,604	2,322	4,560	35,064	2,227	8	5	29,018	181,447
1960-64	61,901	3,367	573	48,338	1,129	54,913	57,435	1,653	281	22	30,625	260,242
1955	86,678	3,643	1,449	12,822	2,883	1,481	19,364	1,890	12	4	31,452	161,678
1956	85,624	1,068	876	17,187	2,729	1,331	7,818	2,703	28	11	19,966	139,341
1957	92,996	3,907	2,150	19,434	1,557	4,318	24,639	2,969	0	6	30,732	182,710
1958	73,554	3,431	1,841	35,645	1,549	7,731	66,593	1,732	1	4	30,265	222,347
1959	55,722	3,309	1,945	37,933	2,893	7,937	56,907	1,839	1	1	32,674	201,161
1960	57,621	1,309	485	44,544	2,454	43,487	45,779	1,971	0	25	25,374	223,046
1961	64,859	1,816	1,278	33,893	1,457	66,530	61,040	1,475	1	2	30,339	262,690
1962	65,485	4,202	442	44,158	894	47,214	76,544	1,379	125	0	30,502	270,951
1963	37,367	8,249	260	53,117	466	48,440	64,817	1,669	537	42	37,231	252,195
1964	84,175	1,257	398	65,980	372	68,893	38,994	1,771	745	41	29,678	292,304
1965	65,329	2,567	654	69,074	861	53,176	54,332	1,202	1,405	45	27,191	275,836
	Percent											
5-year average:												
1955-59	43.5	1.7	0.9	13.5	1.3	2.5	19.8	1.2	-	-	16.0	100.0
1960-64	23.8	1.3	.2	18.6	.4	21.1	22.1	.6	.1	-	11.8	100.0
1955	53.6	2.3	.9	7.9	1.8	.9	12.0	1.2	-	-	19.5	100.0
1956	61.4	.8	.6	12.3	2.0	1.0	5.6	1.9	-	-	14.3	100.0
1957	50.9	2.1	1.2	10.6	.9	2.4	13.5	1.6	0	-	16.8	100.0
1958	33.1	1.5	.8	16.0	.7	3.5	29.9	.8	-	-	13.6	100.0
1959	27.7	1.6	1.0	18.9	1.4	3.9	28.3	.9	-	-	16.2	100.0
1960	25.8	.6	.2	20.0	1.1	19.5	20.5	.9	0	-	11.3	100.0
1961	24.7	.7	.5	12.9	.6	25.3	23.2	.6	-	-	11.5	100.0
1962	24.2	1.6	.2	16.3	.3	17.4	28.2	.5	-	0	11.3	100.0
1963	14.8	3.3	.1	21.1	.2	19.4	25.7	.7	.2	-	14.8	100.0
1964	28.8	.4	.1	22.6	.1	23.6	13.3	.6	.3	-	10.2	100.0
1965	23.7	.9	.2	25.0	.3	19.3	19.7	.4	.5	-	9.9	100.0

1/ Includes mainly pepper, vanilla beans, cassia and cassia vera, nutmeg, and caraway seed. 2/ Includes mainly beef and veal, pork, mutton, goat, lamb, and poultry meat. 3/ Includes mainly coconut oil, castor oil, olive oil, palm oil, carnauba wax, cocoa butter, tung oil, and palm kernel oil; also copra, sesameseed, poppyseed, and sunflowerseed. Excludes essential and distilled oils. 4/ Includes mainly sheepskins, lambskins, goatskins, and kidskins, cattle hides; horse, colt, and ass hides, and calfskins.

- = less than 0.05 percent. Source: For. Agr. Trade of the United States, ERS/USDA, Mar.-Apr. 1965, Nov. 1965, Aug. 1966.

Table 29.--U.S. agricultural exports to Mexico, 1955-65, value, and percentage of total agricultural exports

Periods and years	Wheat & wheat flour 1/	Rice, milled 1/	Feed grains 1/2/	Tobacco, unmanuf.	Vegetable fats & oils 1/3/	Oil-seeds	Oilcake & meal	Fruits & prepara-tions	Vegetables & prepara-tions	Nuts & prepara-tions	Animal fats & oils	Poultry	Other meat products	Hides & skins	Dairy products 1/	Other 1/ 4/	Total 1/
								1,000 dollars									
5-year average:																	
1955-59. . . .	1,653	50	24,745	3,479	2,135	2,053	447	2,590	6,074	335	5,942	325	1,327	4,519	4,399	18,169	78,242
1960-64. . . .	2,284	700	12,304	4,570	2,219	743	1,619	3,168	4,227	338	1,648	206	1,320	5,088	7,775	19,475	67,684
1955	1,279	-	3,315	2,098	1,453	3,045	80	1,550	3,680	305	7,193	37	1,103	5,049	3,001	17,208	49,396
1956	6,382	135	16,744	2,484	1,515	3,672	250	1,931	3,481	291	8,050	218	799	5,288	3,820	13,520	68,580
1957	130	5	51,843	2,529	1,521	1,405	544	3,368	3,315	879	5,479	351	1,272	3,354	4,453	24,064	103,512
1958	103	42	46,755	3,987	5,577	1,452	672	3,020	10,313	105	6,502	505	1,343	2,667	5,293	18,002	106,338
1959	372	69	5,067	6,297	610	690	690	3,083	9,580	94	2,585	516	2,120	6,236	5,430	18,049	61,488
1960	289	2,040	6,103	3,816	722	948	1,812	2,906	6,240	188	1,870	94	1,046	5,512	5,650	16,629	55,915
1961	866	726	6,444	4,687	7,559	733	1,335	2,758	3,851	296	1,967	179	1,219	4,410	6,514	16,864	60,108
1962	3,268	23	11,151	5,228	979	817	1,414	2,937	2,961	286	1,674	320	1,127	4,075	8,060	19,073	63,393
1963	3,666	255	29,426	4,477	664	640	807	3,551	3,905	344	1,388	179	1,343	3,712	10,064	19,039	83,460
1964	3,332	457	8,397	4,641	1,169	577	2,728	3,686	4,178	577	1,339	252	1,864	7,733	8,588	25,769	75,314
1965	751	2,470	12,009	3,915	8,245	1,298	2,565	4,014	2,550	539	1,978	237	2,685	9,238	7,227	27,102	86,823
								Percent									
5-year average:																	
1955-59. . . .	2.1	0.1	31.6	4.4	2.7	2.6	0.6	3.3	7.8	0.4	7.6	0.4	1.7	5.8	5.6	23.2	100.0
1960-64. . . .	3.4	1.0	18.2	6.7	3.3	1.1	2.4	4.7	6.2	.5	2.4	.3	1.9	7.5	11.5	28.8	100.0
1955	2.6	-	6.7	4.2	2.9	6.2	.2	3.1	7.4	.6	14.6	.1	2.2	10.2	6.1	34.8	100.0
1956	9.3	.2	24.4	3.6	2.2	5.4	.4	2.8	5.1	.4	11.7	.3	1.2	7.7	5.6	19.7	100.0
1957	.1	-	50.1	2.4	1.5	1.4	.5	3.3	3.2	.8	5.3	.3	1.2	3.2	4.3	23.2	100.0
1958	.1	-	44.0	3.7	5.2	1.4	.6	2.8	9.7	.1	6.1	.5	1.3	2.5	5.0	16.9	100.0
1959	.6	.1	8.2	10.2	1.0	1.1	1.1	5.0	15.6	.2	4.2	.8	3.4	10.1	8.8	29.4	100.0
1960	0.5	3.6	10.9	6.8	1.3	1.7	3.2	5.2	11.2	0.3	0.3	.2	1.9	9.9	10.1	29.7	100.0
1961	1.4	1.2	10.7	7.8	12.6	1.2	2.2	4.6	6.4	.5	3.3	.3	2.0	7.3	10.8	28.1	100.0
1962	5.2	-	17.6	8.2	1.5	1.3	2.2	4.6	4.7	.5	2.6	.5	1.8	6.4	12.7	30.1	100.0
1963	4.4	.3	35.3	5.4	.8	.8	1.0	4.3	4.7	.4	1.7	.2	1.6	4.4	12.1	22.8	100.0
1964	4.4	.6	11.1	6.2	1.6	.8	3.6	4.9	5.5	.8	1.8	.3	2.5	10.3	11.4	34.2	100.0
1965	.9	2.8	13.8	4.5	9.5	1.5	3.0	4.6	2.9	.6	2.3	.3	3.1	10.6	8.3	31.2	100.0

1/ Includes food exported for relief or charity by individuals or private agencies. 2/ Barley, corn, oats, and grain sorghums; excluding their products. 3/ Excludes essential oils which are included in "other." 4/ Mainly feed, field and garden seeds, coffee, hops, essential oils, sugar, and related products.

Sources: Foreign Agricultural Trade of the United States, ERS/USDA, and Anuario Estadistico del Comercio Exterior, 1956, Secretaria de Industria y Comercio, Mexico City, 1967.

Table 30.--Mexico: Agricultural imports by principal countries

Commodity	1960	1961	1962	1963	1964	1965	1960	1961	1962	1963	1964	1965
	1,000 dollars						Percent					
Wheat & wheat flour.	320	610	2,849	4,679	4,926	1,188	100.0	100.0	100.0	100.0	100.0	100.0
United States. . .	320	610	2,849	4,679	4,926	1,128	100.0	100.0	100.0	100.0	100.0	94.9
All others	-	-	-	-	-	60	-	-	-	-	-	5.9
Corn & corn flour. .	2,103	2,582	7,305	34,047	4,238	1,743	100.0	100.0	100.0	100.0	100.0	100.0
United States. . .	2,103	2,582	7,305	28,622	4,238	1,743	100.0	100.0	100.0	84.1	100.0	100.0
All others	..	..	..	5,425	..	..	..	..	..	15.9	..	..
Barley, grain & malt	4,059	2,306	2,606	1,014	3,390	8,317	100.0	100.0	100.0	100.0	100.0	100.0
United States. . .	4,052	2,300	2,599	1,008	3,369	8,312	99.8	99.7	99.7	99.4	99.4	99.9
All others	7	6	7	6	21	5	0.2	0.3	0.3	0.0	0.6	0.1
Oats	388	325	373	260	242	931	100.0	100.0	100.0	100.0	100.0	100.0
United States. . .	388	325	373	260	236	830	100.0	100.0	100.0	100.0	97.5	89.2
Argentina.	..	..	..	..	..	94	..	..	..	..	..	10.1
Canada	-	..	..	..	6	7	-	..	..	..	2.5	.7
Sorghum grains . . .	1,146	2,145	3,352	7,584	1,371	2,034	100.0	100.0	100.0	100.0	100.0	100.0
United States. . .	1,146	2,145	3,352	7,584	1,368	2,021	100.0	100.0	100.0	100.0	99.8	99.4
Canada	..	..	..	..	3	13	..	..	..	..	.2	.6
Dry beans.	2,473	900	341	80	64	83	100.0	100.0	100.0	100.0	100.0	100.0
United States. . .	2,434	900	341	80	64	83	98.4	100.0	100.0	100.0	100.0	100.0
All others	9	-	-	-	-	-	1.6	-	-	-	-	-
Cattle	3,489	3,774	3,906	4,725	3,932	5,239	100.0	100.0	100.0	100.0	100.0	100.0
United States. . .	3,190	3,317	3,251	4,005	3,304	4,359	91.4	87.9	83.2	84.8	84.0	83.2
Canada	244	457	655	720	628	879	7.0	12.1	16.8	15.2	16.0	16.8
All others	55	..	..	-	-	1	1.6	..	..	-	-	-
Baby chicks.	755	725	940	1,181	972	1,134	100.0	100.0	100.0	100.0	100.0	100.0
United States. . .	751	722	930	1,175	964	1,121	99.5	99.6	98.9	99.5	99.2	98.9
Canada	3	-	8	2	7	12	.4	-	.9	.2	.7	1.1
All others	1	3	2	4	1	1	.1	.4	.2	.3	.1	-
Meat & meat products	2,296	2,054	1,746	1,781	2,126	1,938	100.0	100.0	100.0	100.0	100.0	100.0
United States. . .	1,590	1,552	743	1,366	1,463	1,672	69.2	75.6	42.6	76.7	68.8	86.3
Netherlands. . . .	86	18	51	7	31	42	3.7	.9	2.9	.4	1.5	2.2
France	157	136	138	93	65	41	6.8	6.6	7.9	5.2	3.1	2.1
Spain.	58	40	110	100	120	34	2.5	1.9	6.3	5.6	5.6	1.8
Italy.	24	11	38	15	11	27	1.0	.5	2.2	0.8	0.5	1.4
United Kingdom . .	136	52	37	12	60	16	5.9	2.5	2.1	.7	2.8	.8
South Africa . . .	1	..	..	85	87	34	-	..	..	4.8	4.1	1.8
Argentina.	18	55	125	53	169	16	.8	2.7	7.2	3.0	7.9	0.8
All others	226	190	504	50	120	56	10.1	9.3	28.8	2.8	5.7	2.8
Milk, fresh & processed	5,904	5,525	7,642	10,341	9,713	5,823	100.0	100.0	100.0	100.0	100.0	100.0
United States. . .	5,578	5,451	7,582	10,340	9,713	5,717	94.5	98.7	99.2	100.0	100.0	98.2
Netherlands. . . .	111	50	53	-	-	-	1.9	.9	.7	-	-	-
Canada	214	17	6	..	..	106	3.6	.3	.1	..	..	1.8
All others	1	7	1	1	-	-	-	.1	-	-	-	-

Table 30.--Mexico: Agricultural imports by principal countries--Continued

Commodity	1960	1961	1962	1963	1964	1965	1960	1961	1962	1963	1964	1965
	1,000 dollars						Percent					
Fresh fruits	1,508	1,073	1,151	1,170	1,150	1,140	100.0	100.0	100.0	100.0	100.0	100.0
United States	1,508	1,073	1,151	1,170	1,150	1,140	100.0	100.0	100.0	100.0	100.0	100.0
All others	-	-	-	-	-	-	-	-	-	-	-	-
Oilseeds	619	494	678	389	465	1,221	100.0	100.0	100.0	100.0	100.0	100.0
United States	610	492	676	389	465	1,216	98.5	99.6	99.7	100.0	100.0	99.6
All others	9	2	2	-	-	5	1.5	.4	.3	-	-	.4
Hops	2,212	1,784	2,011	1,190	2,527	2,316	100.0	100.0	100.0	100.0	100.0	100.0
United States	2,195	1,733	1,983	1,166	2,496	2,270	99.2	97.1	98.6	98.0	98.8	98.0
Germany	17	51	5	24	31	12	.8	2.9	.2	2.0	1.2	.5
Yugoslavia	-	-	22	-	-	34	-	-	1.1	-	-	1.5
All others	-	-	1	-	-	-	-	-	.1	-	-	-
Seeds	4,020	4,428	5,528	10,507	3,835	4,959	100.0	100.0	100.0	100.0	100.0	100.0
United States	3,345	4,078	5,272	10,135	3,521	4,541	83.2	92.2	95.4	96.5	91.8	91.6
Spain	321	285	211	304	278	360	8.0	6.4	3.8	2.9	7.2	7.3
Netherlands	247	22	27	22	10	20	6.1	.5	.5	.2	.3	.4
Denmark	82	24	8	18	5	12	2.0	.5	.1	.2	.1	.2
All others	31	19	10	28	21	26	.7	.4	.2	.2	.6	.5
Animal fats 1/ 2/	1,501	714	746	634	953	1,120	100.0	100.0	100.0	100.0	100.0	100.0
United States	1,203	466	475	343	499	489	80.1	65.3	63.7	54.1	52.4	43.7
United Kingdom	133	173	163	145	222	277	8.9	24.2	21.8	22.9	23.3	24.7
Belgium	62	37	43	83	77	100	4.1	5.2	5.8	13.1	8.1	8.9
Germany	4	16	26	20	21	9	.3	2.2	3.5	3.2	2.2	.8
Argentina	..	2	..	..	103	197	..	.3	..	..	10.8	17.6
All others	99	20	39	43	31	48	6.8	2.8	5.2	6.7	3.2	4.3
Vegetable fats & oils 2/	834	7,311	1,397	1,530	2,055	8,242	100.0	100.0	100.0	100.0	100.0	100.0
United States	497	6,850	689	484	1,383	7,431	59.6	93.8	49.3	31.6	67.3	90.2
Spain	265	395	609	725	396	183	31.8	5.5	43.6	47.4	19.3	2.2
Argentina	3	-	23	153	127	130	.4	-	1.6	10.0	6.2	1.6
France	14	..	24	39	12	130	1.7	..	1.7	2.5	.6	1.6
Belgium	..	..	2	5	11	100	..	..	.1	.3	.5	1.2
Brazil	3	4	35	35	77	95	.4	.1	2.5	2.3	3.7	1.2
Germany	52	38	15	89	49	173	6.1	.6	1.2	8.2	2.4	2.0
Animal feed	6,165	5,686	5,493	5,663	7,785	6,270	100.0	100.0	100.0	100.0	100.0	100.0
United States	6,043	5,506	5,236	5,388	7,438	6,145	98.0	96.8	95.3	95.1	95.5	98.0
Norway	50	7	7	13	9	4	.8	.1	.1	.2	.1	.1
Netherlands	..	92	146	77	7	..	..	1.6	2.7	1.4	.1	.1
Canada	-	-	-	21	19	-	-	-	-	.4	.2	-
All others	72	81	104	164	312	121	1.2	1.9	1.9	2.9	4.1	1.9
Wool (unmanufactured)	10,064	9,981	11,426	12,451	20,582	22,730	100.0	100.0	100.0	100.0	100.0	100.0
United States	260	331	153	367	298	264	2.6	3.3	1.3	2.9	1.4	1.2
Australia	8,878	8,915	10,377	10,071	18,328	19,482	88.2	89.2	90.8	80.9	88.9	85.7
New Zealand	306	355	287	194	600	451	3.0	3.6	2.5	1.6	2.9	2.0
United Kingdom	26	5	277	337	658	446	.3	.1	2.4	2.7	3.2	2.0
Argentina	74	70	27	216	332	1,731	.7	.7	.2	1.7	1.6	7.6
Uruguay	-	21	-	49	60	213	-	.2	-	.4	.3	.9
All others	520	284	305	1,217	364	143	5.1	2.9	2.7	9.8	1.7	.6

Table 30.--Mexico: Agricultural imports by principal countries--Continued

Commodity	1960	1961	1962	1963	1964	1965	1960	1961	1962	1963	1964	1965
	1,000 dollars						Percent					
Hides & skins 3/	4,859	4,061	3,979	3,485	7,811	8,876	100.0	100.0	100.0	100.0	100.0	100.0
United States	4,844	4,061	3,873	3,419	7,682	8,857	99.7	100.0	97.3	98.2	98.3	99.8
Canada	15	-	14	39	40	18	.3	-	.4	1.1	.5	.2
United Kingdom	-	-	90	22	7	-	-	-	2.3	.6	.1	-
All others	-	-	2	5	82	1	-	-	-	.1	1.1	-
Tobacco & tobacco products	5,153	5,761	6,706	5,782	6,188	5,400	100.0	100.0	100.0	100.0	100.0	100.0
United States	4,992	5,630	6,569	5,701	6,128	5,288	97.0	97.0	98.0	98.6	99.0	97.9
Netherlands	55	44	74	67	48	100	1.1	.8	1.1	1.2	.8	1.9
United Kingdom	11	21	16	9	1	9	.2	.4	.2	.2	-	.2
All others	75	66	47	5	11	3	1.7	1.1	.7	..	.2	..
Total commodities listed	59,480	61,239	68,819	108,493	84,325	90,704	100.0	100.0	100.0	100.0	100.0	100.0
United States	47,449	50,124	55,402	87,681	60,705	64,627	79.8	81.8	80.5	80.8	72.0	71.3
Other countries	12,031	11,115	13,417	20,812	23,620	26,077	20.2	18.2	19.5	19.2	28.0	28.7
Total agricultural imports 4/	99,500	92,700	92,000	131,200	120,500	136,200	100.0	100.0	100.0	100.0	100.0	100.0
Listed commodities							59.8	66.0	74.8	82.7	70.0	66.6

1/ Excluding fish oil. 2/ Edible and nonedible, excluding lubricants. 3/ Cattle hides and skins only. 4/ Excluding manufactured fertilizers and insecticides, worked wood products, and agricultural machinery.

- = less than $500 or less than 0.05 percent. .. = nil.

Sources: Anuario Estadistico del Comercio Exterior, 1960-1965, Direccion General de Estadistica, Mexico City; and Trade Yearbook 1966, FAO, Rome 1967.

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